May 26, 2009

Mr. Victor Alverez
US Environmental Protection Agency
RGP-NOC Processing Center
Municipal Assistance Unit
1 Congress Street, Suite 1100
Boston, MA 02114-2023

RE: Notice of Intent for Application of Remediation General Permit
ATF Davidson/Arcade
355 Main Street
Northbridge (Whitinsville), MA 01588
Release Tracking Number 2-11846

Dear Mr. Alverez:

Triumvirate Environmental Inc. (TEI) on behalf of Performance Contracting, Inc. has prepared this Notice of Intent (NOI) for Application of Remediation General Permit (RGP) for the above referenced property (the Site). The purpose of this NOI is to discharge treated groundwater to an on-site stormwater catch basin during construction-related activities authorized as part of the Release Abatement Measure associated with Release Tracking Number (RTN) 2-11846. The following support documentation has been included with this NOI for Application of RGP:

- Suggested Form for NOI For the Remediation General Permit;
- USGS Locus Map;
- BioMap produced by Natural Heritage and Endangered Species Program;
- 2008 Priority Habitat and Estimated Habitat Natural Heritage and Endangered Species Program;
- Treatment System Design Schematic;
- Material Safety Data Sheet for Petroleum Hydrocarbons;
- Dilution Factor Calculation sheet; and
- Untreated groundwater analytical laboratory report.

The Site is currently occupied by Core-Mark International and operates as a light manufacturing, warehousing and distribution facility. Site construction activities are currently in process and include the expansion of the existing loading/unloading docks from the existing facility. Depth to groundwater in the construction zone is

approximately 4 feet below grade; and thus, site dewatering activities have been implemented in order to facilitate the construction of the loading/unloading docks.

Groundwater is currently being extracted from the loading/unloading dock excavation and contained within 21,000-gallon fractionation (frac) tanks. It is anticipated that more than 500,000 gallons of groundwater will require on-site treatment.

For the purpose of this design, TEI anticipates pumping 75 gallons per minute before discharging to an on-site storm drainage catch basin located immediately west of the excavation. This catch basin is connected to a storm drainage equalizer line that runs through the center of the property. This equalizer line is connected to Arcade Pond and Meadow Pond, located immediately north and south of the Site, respectively. These ponds discharge into Mumford River and subsequently, to the Blackstone River.

Groundwater samples collected on May 19, 2009 revealed that the system influent will potentially contain iron and total suspended metals above effluent standards if left untreated. Concentrations of select polynuclear aromatic hydrocarbons and metals were detected below the applicable effluent limits. The anticipated treatment includes frac tanks, bag filters, and granular activated carbon.

The discharge of treated groundwater is anticipated to begin immediately following receipt of the RGP from the US EPA. Please feel free to contact me with any questions or comments at our office (800) 966-9282.

Sincerely,
Triumvirate Environmental, Inc.

Michael C. Bricher, P.G.
Senior Engineer

Attachments

cc: Mr. Neal M. Drawas, LSP, Marsh Risk Consulting, 99 High Street Boston, MA 02110
Mr. Tim Beaubien, Performance Contracting, Inc., 3030 Orange Grove, North Highlands, CA 95660
MA DEP, Division of Watershed Management, 627 Main Street, 2nd Floor, Worcester, MA 01608
Mr. Richard R. Sasseville, P.E., Northbridge Department of Public Works, Highway Division, 11 Fletcher Street, Northbridge, MA 01588

B. Suggested Form for Notice of Intent (NOI) for the Remediation General Permit

1. General site information. Please provide the following information about the site:

a) Name of **facility/site:** Core-Mark		**Facility/site address:** 355 Main Street		
Location of **facility/site:** longitude: 71 4' 46" latitude: 42 6' 41"	Facility SIC code(s): 1541	Street: 355 Main Street		
b) Name of **facility/site owner:** Core-Mark		Town: Northbridge		
Email address of owner: Tim.Beaubien@pcg.com		State: MA	Zip: 01588	County: Worcester
Telephone no.of facility/site **owner:** 916-576-3903				
Fax no. of facility/site **owner:**		**Owner** is (check one): 1. Federal___ 2. State/Tribal___ 3. Private ✓ 4. other, if so, describe:		
Address of **owner** (if different from site): Arcade Realty Trust				
Street: 1 Main Street				
Town: Northbridge	State: MA	Zip: 01588	County: Worcester	
c) Legal name of **operator:** Triumvirate Environmental	**Operator** telephone no: 800-966-9282			
	Operator fax no.: 617-628-8099	**Operator** email: mbricher@triumvirate.com		
Operator contact name and title: Michael Bricher				
Address of **operator** (if different from owner):	Street: 61 Inner Belt Road			
Town: Somerville	State: MA	Zip: 02143	County: Middlesex	

d) Check "yes" or "no" for the following:
1. Has a prior NPDES permit exclusion been granted for the discharge? Yes___ No ✓, if "yes," number:
2. Has a prior NPDES application (Form 1 & 2C) ever been filed for the discharge? Yes___ No ✓, if "yes," date and tracking #:
3. Is the discharge a "new discharge"as defined by 40 CFR 122.2? Yes___ No ✓
4. For sites in Massachusetts, is the discharge covered under the MA Contingency Plan (MCP) and exempt from state permitting? Yes ✓ No___

e) Is site/facility subject to any State permitting or other action which is causing the generation of discharge? Yes___ No✓ If "yes," please list: 1. site identification # assigned by the state of NH or MA: 2. permit or license # assigned: 3. state agency contact information: name, location, and telephone number:	f) Is the site/facility covered by any other EPA permit, including: 1. multi-sector storm water general permit? Y___ N✓, if Y, number: 2. phase I or II construction storm water general permit? Y___ N✓, if Y, number: 3. individual NPDES permit? Y___ N✓, if Y, number: 4. any other water quality related permit? Y___ N✓, if Y, number:

2. Discharge information. Please provide information about the discharge, (attaching additional sheets as needed) including:

a) Describe the discharge activities for which the owner/applicant is seeking coverage:

Temporary storage vessels shall be pumped off through a treatment system. The water shall be treated with particulate filters and carbon filtration. The effluent shall be discharged to a storm water catch basin which drains to Arcade Pond and Meadow Pond.

b) Provide the following information about each discharge:	1) Number of discharge points: 1	2) What is the **maximum** and **average flow rate** of discharge (in cubic feet per second, ft3/s)? Max. flow 0.22 Average flow 0.167 Is maximum flow a **design value**? Y✓ N___ For average flow, include the units and appropriate notation if this value is a design value or estimate if not available.

3) Latitude and longitude of each discharge within 100 feet: pt.1:long. 714046 lat. 42641 ; pt.2: long.___ lat.___; pt.3: long.___ lat.___;
pt.4:long.___ lat.___; pt.5: long.___ lat.___; pt.6:long.___ lat.___; pt.7: long.___ lat.___; pt.8:long.___ lat.___; etc.

4) If hydrostatic testing, total volume of the discharge (gals): NA	5) Is the discharge intermittent✓ or seasonal___? Temporary system, 3 weeks max. Is discharge ongoing Yes___ No✓?

c) Expected dates of discharge (mm/dd/yy): start 06/15/09 end 06/30/09

d) Please attach a line drawing or flow schematic showing water flow through the facility including:
1. sources of intake water, 2. contributing flow from the operation, 3. treatment units, and 4. discharge points and receiving waters(s).

3. Contaminant information. In order to complete this section, the applicant will need to take a minimum of one sample of the untreated water and have it analyzed for **all** of the parameters listed in Appendix III. Historical data, (i.e., data taken no more than 2 years prior to the effective date of the permit) may be used if obtained pursuant to: i. Massachusetts' regulations 310 CMR 40.0000, the Massachusetts Contingency Plan ("Chapter 21E"); ii. New Hampshire's Title 50 RSA 485-A: Water Pollution and Waste Disposal or Title 50 RSA 485-C: Groundwater Protection Act; or iii. an EPA permit exclusion letter issued pursuant to 40 CFR 122.3, provided the data was analyzed with test methods that meet the requirements of this permit. Otherwise, a new sample shall be taken and analyzed.

a) Based on the analysis of the sample(s) of the untreated influent, the applicant must check the box of the sub-categories that the potential discharge falls within.

Gasoline Only	VOC Only	Primarily Metals	Urban Fill Sites ✓	Contaminated Sumps	Mixed Contaminants	Aquifer Testing
Fuel Oils (and Other Oils) only	VOC with Other Contaminants	Petroleum with Other Contaminants ✓	Listed Contaminated Sites	Contaminated Dredge Condensates	Hydrostatic Testing of Pipelines/Tanks	Well Development or Rehabilitation

b) Based on the analysis of the untreated influent, the applicant must indicate whether each listed chemical is **believed present** or **believed absent** in the potential discharge. Attach additional sheets as needed.

PARAMETER	Believe Absent	Believe Present	# of Samples (1 minimum)	Type of Sample (e.g., grab)	Analytical Method Used (method #)	Minimum Level (ML) of Test Method	Maximum daily value		Avg. daily value	
							concentration (ug/l)	mass (kg)	concentration (ug/l)	mass (kg)
1. Total Suspended Solids		✓	1	grab	2540D	5000	62000			
2. Total Residual Chlorine	✓		1	grab	4500	20	<20			
3. Total Petroleum Hydrocarbons		✓	1	grab	1664A	4400	<4400			
4. Cyanide	✓		1	grab	4500	5	<5			
5. Benzene	✓		1	grab	8260B	0.50	<0.50			
6. Toluene	✓		1	grab	8260B	0.75	<0.75			
7. Ethylbenzene	✓		1	grab	8260B	0.50	<0.50			
8. (m,p,o) Xylenes	✓		1	grab	8260B	1.0	<1.0			
9. Total BTEX[4]	✓		1	grab	8260B	2.75	<2.75			

[4] BTEX = Sum of Benzene, Toluene, Ethylbenzene, total Xylenes.

PARAMETER	Believe Absent	Believe Present	# of Samples (1 min-imum)	Type of Sample (e.g., grab)	Analytical Method Used (method #)	Minimum Level (ML) of Test Method	Maximum daily value		Avg. daily value	
							concentration (ug/l)	mass (kg)	concentration (ug/l)	mass (kg)
10. Ethylene Dibromide [5] (1,2- Dibromo-methane)	✓		1	grab	504	0.019	<0.019			
11. Methyl-tert-Butyl Ether (MtBE)	✓		1	grab	8260	1.0	<1.0			
12. tert-Butyl Alcohol (TBA)	✓		1	grab	8260	30	<30			
13. tert-Amyl Methyl Ether (TAME)	✓		1	grab	8260	2.0	<2.0			
14. Naphthalene	✓		1	grab	8270	0.20	<0.20			
15. Carbon Tetra-chloride	✓		1	grab	8260	0.50	<0.50			
16. 1,4 Dichlorobenzene	✓		1	grab	8260	2.5	<2.5			
17. 1,2 Dichlorobenzene	✓		1	grab	8260	2.5	<2.5			
18. 1,3 Dichlorobenzene	✓		1	grab	8260	2.5	<2.5			
19. 1,1 Dichloroethane	✓		1	grab	8260	0.75	<0.75			
20. 1,2 Dichloroethane	✓		1	grab	8260	0.50	<0.50			
21. 1,1 Dichloroethylene	✓		1	grab	8260	0.50	<0.50			
22. cis-1,2 Dichloro-ethylene	✓		1	grab	8260	0.50	<0.50			
23. Dichloromethane (Methylene Chloride)	✓		1	grab	8260	3.0	<3.0			
24. Tetrachloroethylene	✓		1	grab	8260	0.50	<0.50			

[5] EDB is a groundwater contaminant at fuel spill and pesticide application sites in New England.

PARAMETER	Believe Absent	Believe Present	# of Samples (1 min-imum)	Type of Sample (e.g., grab)	Analytical Method Used (method #)	Minimum Level (ML) of Test Method	Maximum daily value		Avg. daily Value	
							concentration (ug/l)	mass (kg)	concentration (ug/l)	mass (kg)
25. 1,1,1 Trichloroethane	✓		1	grab	8260	0.50	<0.50			
26. 1,1,2 Trichloroethane	✓		1	grab	8260	0.75	<0.75			
27. Trichloroethylene	✓		1	grab	8260	0.50	<0.50			
28. Vinyl Chloride	✓		1	grab	8260	1.0	<1.0			
29. Acetone	✓		1	grab	8260	5.0	<5.0			
30. 1,4 Dioxane	✓		1	grab	8260	250	<250			
31. Total Phenols	✓		1	grab	8260	30	<30			
32. Pentachlorophenol	✓		1	grab	8260	0.80	<0.80			
33. Total Phthalates[6] (Phthalate esthers)	✓		1	grab	3510C	0.50	<0.50			
34. Bis (2-Ethylhexyl) Phthalate [Di-(ethylhexyl) Phthalate]	✓		1	grab	3510C	0.50	<0.50			
35. Total Group I Polycyclic Aromatic Hydrocarbons (PAH)	✓		1	grab	8270	0.20	<0.20			
a. Benzo(a) Anthracene	✓		1	grab	8270	0.20	<0.20			
b. Benzo(a) Pyrene	✓		1	grab	8270	0.20	<0.20			
c. Benzo(b)Fluoranthene	✓		1	grab	8270	0.20	<0.20			
d. Benzo(k) Fluoranthene	✓		1	grab	8270	0.20	<0.20			
e. Chrysene	✓		1	grab	8270	0.20	<0.20			

[6] The sum of individual phthalate compounds.

PARAMETER	Believe Absent	Believe Present	# of Samples (1 min-imum)	Type of Sample (e.g., grab)	Analytical Method Used (method #)	Minimum Level (ML) of Test Method	Maximum daily value		Average daily value	
							concentration (ug/l)	mass (kg)	concentration (ug/l)	mass (kg)
f. Dibenzo(a,h) anthracene	✓		1	grab	8270	0.20	<0.20			
g. Indeno(1,2,3-cd) Pyrene	✓		1	grab	8270	0.20	<0.20			
36. Total Group II Polycyclic Aromatic Hydrocarbons (PAH)		✓	1	grab	8270	0.20	0.83			
h. Acenaphthene		✓	1	grab	8270	0.20	0.25			
i. Acenaphthylene	✓		1	grab	8270	0.20	<0.20			
j. Anthracene	✓		1	grab	8270	0.20	<0.20			
k. Benzo(ghi) Perylene	✓		1	grab	8270	0.20	<0.20			
l. Fluoranthene		✓	1	grab	8270	0.20	0.29			
m. Fluorene	✓		1	grab	8270	0.20	<0.20			
n. Naphthalene-	✓		1	grab	8270	0.20	<0.20			
o. Phenanthrene	✓		1	grab	8270	0.20	<0.20			
p. Pyrene		✓	1	grab	8270	0.20	0.29			
37. Total Polychlorinated Biphenyls (PCBs)	✓		1	grab	3665A	0.263	<0.263			
38. Antimony	✓		1	grab	3005A	0.50	<0.50			
39. Arsenic		✓	1	grab	3005A	0.50	1.9			
40. Cadmium	✓		1	grab	3005A	0.20	<0.20			
41. Chromium III	✓		1	grab	30,3500	10	<10			
42. Chromium VI	✓		1	grab	30,3500	10	<10			

PARAMETER	Believe Absent	Believe Present	# of Samples (1 min-imum)	Type of Sample (e.g., grab)	Analytical Method Used (method #)	Minimum Level (ML) of Test Method	Maximum daily value		Avg. daily value	
							concentration (ug/l)	mass (kg)	concentration (ug/l)	mass (kg)
43. Copper	✓		1	grab	3005A	2.0	<2.0			
44. Lead		✓	1	grab	3005A	0.50	0.6			
45. Mercury	✓		1	grab	3005A	0.20	<0.20			
46. Nickel		✓	1	grab	3005A	0.50	3.0			
47. Selenium	✓		1	grab	3005A	1.0	<1.0			
48. Silver	✓		1	grab	3005A	0.4	<0.4			
49. Zinc		✓	1	grab	3005A	10	12.1			
50. Iron		✓	1	grab	3005A	50	4000			
Other (describe):										

c) For discharges where metals are believed present, please fill out the following:

Step 1: Do any of the metals in the influent have a **reasonable potential** to exceed the effluent limits in Appendix III (i.e., the limits set at zero to five dilutions)? Y ✓ N ____	If yes, which metals? Iron
Step 2: For any metals which have **reasonable potential** to exceed the **Appendix III** limits, calculate the **dilution factor (DF)** using the formula in Part I.A.3.c) (step 2) of the NOI instructions or as determined by the State prior to the submission of this NOI. What is the dilution factor for applicable metals? Metals: Iron DF: 64.18	Look up the limit calculated at the corresponding dilution factor in **Appendix IV.** Do any of the metals in the **influent** have the potential to exceed the corresponding **effluent** limits in Appendix IV (i.e., is the influent concentration above the limit set at the calculated dilution factor)? Y ____ N ✓ If "Yes," list which metals:

4. Treatment system information. Please describe the treatment system using separate sheets as necessary, including:

a) A description of the treatment system, including a schematic of the proposed or existing treatment system:						
b) Identify each applicable treatment unit (check all that apply):	Frac. tank ✓	Air stripper	Oil/water separator	Equalization tanks	Bag filter ✓	GAC filter ✓
	Chlorination	Dechlorination	Other (please describe):			
c) Proposed **average** and **maximum flow rates** (gallons per minute) for the discharge and the **design flow rate**(s) (gallons per minute) of the treatment system: Average flow rate of discharge 75 gpm Maximum flow rate of treatment system 100 gpm Design flow rate of treatment system 75 gpm						
d) A description of chemical additives being used or planned to be used (attach MSDS sheets): See attached MSDS						

5. Receiving surface water(s). Please provide information about the receiving water(s), using separate sheets as necessary:

a) Identify the discharge pathway:	Direct____	Within facility__	Storm drain__✓	River/brook__✓	Wetlands____	Other (describe):
b) Provide a narrative description of the discharge pathway, including the name(s) of the receiving waters: Treated groundwater will be discharged nearby storm drain which discharges to the Arcade and Meadow Pond, and ultimately to the Blackstone River.						
c) Attach a detailed map(s) indicating the site location and location of the outfall to the receiving water: 1. For multiple discharges, number the discharges sequentially. 2. For indirect dischargers, indicate the location of the discharge to the indirect conveyance and the discharge to surface water The map should also include the location and distance to the nearest sanitary sewer as well as the locus of nearby sensitive receptors (based on USGS topographical mapping), such as surface waters, drinking water supplies, and wetland areas.						
d) Provide the state water quality classification of the receiving water Class B						
e) Provide the reported or calculated seven day-ten year low flow (7Q10) of the receiving water 0.1 cfs Please attach any calculation sheets used to support stream flow and dilution calculations.						
f) Is the receiving water a listed 303(d) water quality impaired or limited water? Yes____ No✓ If yes, for which pollutant(s)? Is there a TMDL? Yes____ No____ If yes, for which pollutant(s)?						

6. Results of Consultation with Federal Services: Please provide the following information according to requirements of Part I.B.4 and Appendices II and VII.

a) Are any listed threatened or endangered species, or designated critical habitat, in proximity to the discharge? Yes____ No✓
Has any consultation with the federal services been completed ? Yes___ No✓ or is consultation underway? Yes ____ No✓
What were the results of the consultation with the U.S. Fish and Wildlife Service and/or National Marine Fisheries Service (check one):
a "no jeopardy" opinion? _____or written concurrence____ on a finding that the discharges are not likely to adversely affect any endangered species or critical habitat?

b) Are any historic properties listed or eligible for listing on the National Register of Historic Places located on the facility or site or in proximity to the discharge?
Yes_____ No✓____ Have any state or tribal historic preservation officer been consulted in this determination (Massachusetts only)? Yes_____ No✓____

7. Supplemental information. :

Please provide any supplemental information. Attach any analytical data used to support the application. Attach any certification(s) required by the general permit.

8. Signature Requirements: The Notice of Intent must be signed by the operator in accordance with the signatory requirements of 40 CFR Section 122.22, including the following certification:

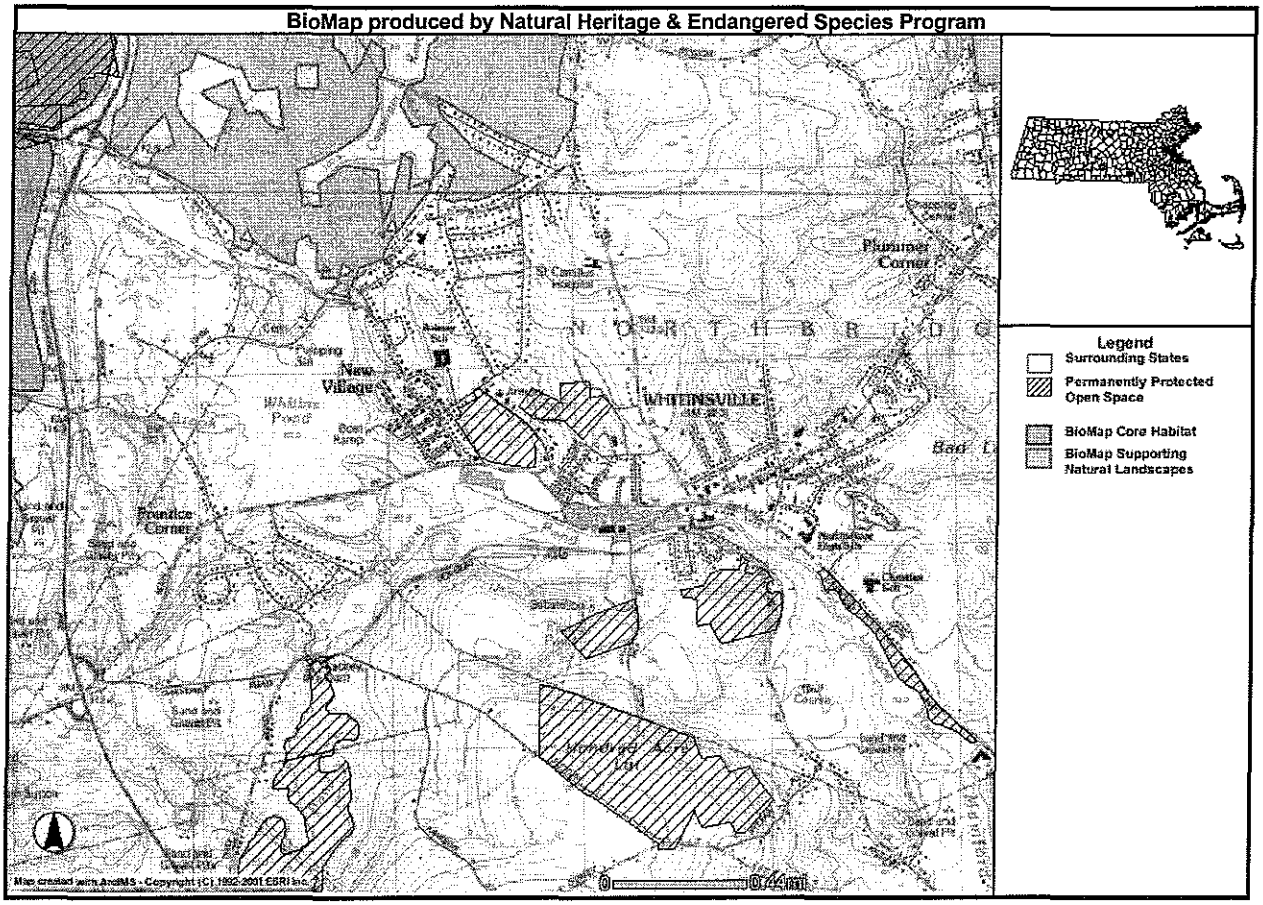
I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, I certify that the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I certify that I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Facility/Site Name: CORE-MARK FACILITY

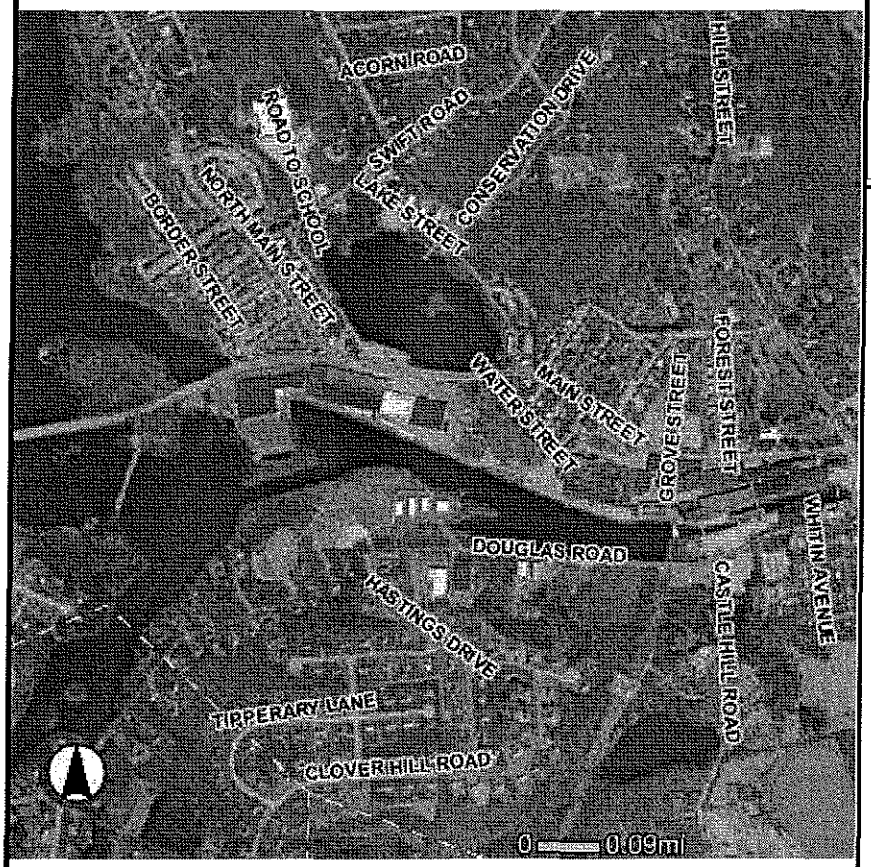
Operator signature: Michael Brie

Title: SR. ENGINEER, TRIUMVIRATE ENVIRONMENTAL

Date: 5-26-2009


BioMap produced by Natural Heritage & Endangered Species Program
Plummer Corner
NORTHBRIDGE
New Village
WHITINSVILLE
Pounce Corner
Legend
Surrounding States
Permanently Protected Open Space
BioMap Core Habitat
BioMap Supporting Natural Landscapes
0
0.74mi

2008 Priority Habitat and Estimated Habitat Natural Heritage & Endangered Species Program



Legend

EOT-OTP Roads Names

EOT-OTP Roads

Limited Access Highway

Multi-lane Hwy, Not Limited Access

Other Numbered Hwy

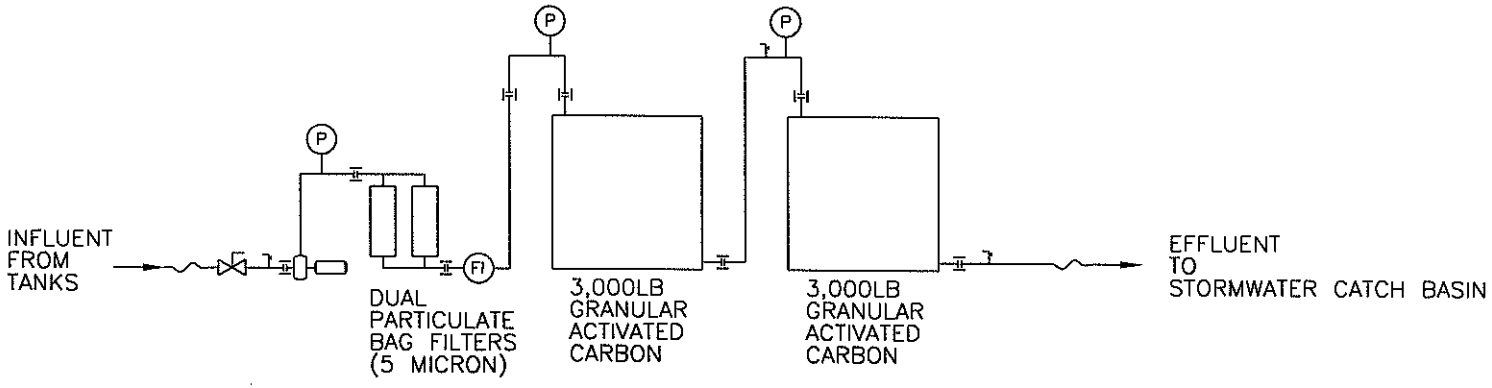
Surrounding States Labels

Surrounding States

NHESP 2008 Priority Habitats of Rare Species and also Estimated Habitats of Rare Wildlife

NHESP 2008 MA Priority Habitats of Rare Species

Color Orthos 2005



P PRESSURE GAUGE

FI FLOW METER

UNION

TRANSFER PUMP

SAMPLE PORT

VALVE

PROCESS LINE

General Notes

No.	Revision/Issue	Date

Triumvirate Environmental, Inc.

61 Inner Belt Road
Somerville, MA 02143
Phone: (800) 966-9282
www.triumvirate.com

Treatment System Diagram

355 Main Street
Northbridge, MA

Project	60590
Date	5/26/09
Scale	NO SCALE

AMERADA HESS CORPORATION

NFPA 704 (Section 16)

MATERIAL SAFETY DATA SHEET

No. 2 Fuel Oil **MSDS No. 0088**

1. CHEMICAL PRODUCT and COMPANY INFORMATION (rev. Jan-98)

Amerada Hess Corporation
1 Hess Plaza
Woodbridge, NJ 07095-0961

EMERGENCY TELEPHONE NUMBER (24 hrs): CHEMTREC (800) 424-9300
COMPANY CONTACT (business hours): Corporate Safety (732) 750-6000
SYNONYMS: #2 Heating Oil; 2 Oil; Off-road Diesel Fuel

See Section 16 for abbreviations and acronyms.

2. COMPOSITION and INFORMATION ON INGREDIENTS (rev. Sep-98)

INGREDIENT NAME	EXPOSURE LIMITS	CONCENTRATION PERCENT BY WEIGHT
#2 Fuel Oil CAS NUMBER: 68476-30-2	OSHA PEL-TWA: 5 mg/m^3 as mineral oil mist ACGIH TLV-TWA: 1997 NOIC - 100 mg/m^3, skin, A3	100
Naphthalene CAS NUMBER: 91-20-3	OSHA PEL-TWA: 10 ppm ACGIH TLV-TWA/STEL: 10 / 15 ppm, A4	Typically 0.1

A complex combination of hydrocarbons with carbon numbers in the range C9 and higher produced from the distillation of petroleum crude oil.

3. HAZARDS IDENTIFICATION (rev. Jan-98; Tox-98)

EMERGENCY OVERVIEW
CAUTION!
OSHA/NFPA COMBUSTIBLE LIQUID - SLIGHT TO MODERATE IRRITANT - EFFECTS CENTRAL NERVOUS SYSTEM - HARMFUL OR FATAL IF SWALLOWED

Moderate fire hazard. Avoid breathing vapors or mists. May cause dizziness and drowsiness. May cause moderate eye irritation and skin irritation. Long-term, repeated exposure may cause skin cancer.

If ingested, do NOT induce vomiting, as this may cause chemical pneumonia (fluid in the lungs).

EYES
Contact with eyes may cause mild irritation.

SKIN
Practically non-toxic if absorbed following acute (single) exposure. May cause skin irritation with prolonged or repeated contact. Liquid may be absorbed through the skin in toxic amounts if large areas of skin are repeatedly exposed.

INGESTION
The major health threat of ingestion occurs from the danger of aspiration (breathing) of liquid drops into the lungs, particularly from vomiting. Aspiration may result in chemical pneumonia (fluid in the lungs), severe lung damage, respiratory failure and even death.

Ingestion may cause gastrointestinal disturbances, including irritation, nausea, vomiting and diarrhea, and central nervous system (brain) effects similar to alcohol intoxication. In severe cases, tremors, convulsions, loss of consciousness, coma, respiratory arrest, and death may occur.

INHALATION
Excessive exposure may cause irritations to the nose, throat, lungs and respiratory tract. Central nervous system (brain) effects may include headache, dizziness, loss of balance and coordination, unconsciousness, coma, respiratory failure, and death.

WARNING: the burning of any hydrocarbon as a fuel in an area without adequate ventilation may result in hazardous levels of combustion products, including carbon monoxide, and inadequate oxygen levels, which may cause unconsciousness, suffocation, and death.

CHRONIC EFFECTS and CARCINOGENICITY
Similar products have produced skin cancer and systemic toxicity in laboratory animals following repeated applications. The significance of these results to human exposures has not been determined - see Section 11Toxicological Information.

MEDICAL CONDITIONS AGGRAVATED BY EXPOSURE
Irritation from skin exposure may aggravate existing open wounds, skin disorders, and dermatitis (rash).

4. FIRST AID MEASURES (rev. Jan-98; Tox-98)

EYES
In case of contact with eyes, immediately flush with clean, low-pressure water for at least 15 min. Hold eyelids open to ensure adequate flushing. Seek medical attention.

SKIN
Remove contaminated clothing. Wash contaminated areas thoroughly with soap and water or with waterless hand cleanser. Obtain medical attention if irritation or redness develops.

INGESTION
DO NOT INDUCE VOMITING. Do not give liquids. Obtain immediate medical attention. If spontaneous vomiting occurs, lean victim forward to reduce the risk of aspiration. Monitor for breathing difficulties. Small amounts of material which enter the mouth should be rinsed out until the taste is dissipated.

INHALATION
Remove person to fresh air. If person is not breathing, provide artificial respiration. If necessary, provide additional oxygen once breathing is restored if trained to do so. Seek medical attention immediately.

5. FIRE FIGHTING MEASURES (rev. Sep-94)

FLAMMABLE PROPERTIES:

FLASH POINT:	100 °F (38 °C) minimum PMCC
AUTOIGNITION POINT:	494 °F (257 °C)
LOWER EXPLOSIVE LIMIT (%):	0.6
UPPER EXPLOSIVE LIMIT (%):	7.5

FIRE AND EXPLOSION HAZARDS
OSHA and NFPA Class 2 COMBUSTIBLE LIQUID (see Section 14 for transportation classification). Vapors may be ignited rapidly when exposed to heat, spark, open flame or other source of ignition. When mixed with air and exposed to an ignition source, flammable vapors can burn in the open or explode in confined spaces. Being heavier than air, vapors may travel long distances to an ignition source and flash back. Runoff to sewer may cause fire or explosion hazard.

EXTINGUISHING MEDIA
SMALL FIRES: Any extinguisher suitable for Class B fires, dry chemical, CO2, water spray, fire fighting foam, or Halon.

LARGE FIRES: Water spray, fog or fire fighting foam. Water may be ineffective for fighting the fire, but may be used to cool fire-exposed containers.

FIRE FIGHTING INSTRUCTIONS
Small fires in the incipient (beginning) stage may typically be extinguished using handheld portable fire extinguishers and other fire fighting equipment.

Firefighting activities that may result in potential exposure to high heat, smoke or toxic by-products of combustion should require NIOSH/MSHA- approved pressure-demand self-contained breathing apparatus with full facepiece and full protective clothing.

Isolate area around container involved in fire. Cool tanks, shells, and containers exposed to fire and excessive heat with water. For massive fires the use of unmanned hose holders or monitor nozzles may be advantageous to further minimize personnel exposure. Major fires may require withdrawal, allowing the tank to burn. Large storage tank fires typically require specially trained personnel and equipment to extinguish the fire, often including the need for properly applied fire fighting foam.

See Section 16 for the NFPA 704 Hazard Rating.

6. ACCIDENTAL RELEASE MEASURES (rev. Jan-98)

ACTIVATE FACILITY'S SPILL CONTINGENCY OR EMERGENCY RESPONSE PLAN.

Evacuate nonessential personnel and remove or secure all ignition sources. Consider wind direction; stay upwind and uphill, if possible. Evaluate the direction of product travel, diking, sewers, etc. to confirm spill areas. Spills may infiltrate subsurface soil and groundwater; professional assistance may be necessary to determine the extent of subsurface impact.

Carefully contain and stop the source of the spill, if safe to do so. Protect bodies of water by diking, absorbents, or absorbent boom, if possible. Do not flush down sewer or drainage systems, unless system is designed and permitted to handle such material. The use of fire fighting foam may be useful in certain situations to reduce vapors. The proper use of water spray may effectively disperse product vapors or the liquid itself, preventing contact with ignition sources or areas/equipment that require protection.

Take up with sand or other oil absorbing materials. Carefully shovel, scoop or sweep up into a waste container for reclamation or disposal. Response and clean-up crews must be properly trained and must utilize proper protective equipment (see Section 8).

7. HANDLING and STORAGE (rev. Jan-98)

HANDLING PRECAUTIONS

Handle as a combustible liquid. Keep away from heat, sparks, excessive temperatures and open flame! No smoking or open flame in storage, use or handling areas. Bond and ground containers during product transfer to reduce the possibility of static-initiated fire or explosion.

Special slow load procedures for "switch loading" must be followed to avoid the static ignition hazard that can exist when this product is loaded into tanks previously containing low flash point products (such as gasoline) - see API Publication 2003, "Protection Against Ignitions Arising Out Of Static, Lightning and Stray Currents."

STORAGE PRECAUTIONS

Keep containers closed and clearly labeled. Use approved vented storage containers. Empty product containers or vessels may contain explosive vapors. Do not pressurize, cut, heat, weld or expose such containers to sources of ignition.

Store in a well-ventilated area. This storage area should comply with NFPA 30 "Flammable and Combustible Liquid Code". Avoid storage near incompatible materials. The cleaning of tanks previously containing this product should follow API Recommended Practice (RP) 2013 "Cleaning Mobile Tanks In Flammable and Combustible Liquid Service" and API RP 2015 "Cleaning Petroleum Storage Tanks."

WORK/HYGIENIC PRACTICES

Emergency eye wash capability should be available in the near proximity to operations presenting a potential splash exposure. Use good personal hygiene practices. Avoid repeated and/or prolonged skin exposure. Wash hands before eating, drinking, smoking, or using toilet facilities. Do not use as a cleaning solvent or harsh abrasive skin cleaners for washing this product from exposed skin areas. Waterless hand cleaners are effective. Promptly remove contaminated clothing and launder before reuse.

Use care when laundering to prevent the formation of flammable vapors which could ignite via washer or dryer. Consider the need to discard contaminated leather shoes and gloves.

8. EXPOSURE CONTROLS and PERSONAL PROTECTION (rev. Jan-98)

ENGINEERING CONTROLS

Use adequate ventilation to keep vapor concentrations of this product below occupational exposure and flammability limits, particularly in confined spaces.

EYE/FACE PROTECTION

Safety glasses or goggles are recommended where there is a possibility of splashing or spraying.

SKIN PROTECTION

Gloves constructed of nitrile, neoprene, or PVC are recommended. Chemical protective clothing such as of E.I. DuPont TyChem®, Saranex® or equivalent recommended based on degree of exposure. Note: The resistance of specific material may vary from product to product as well as with degree of exposure. Consult manufacturer specifications for further information.

RESPIRATORY PROTECTION

A NIOSH/MSHA-approved air-purifying respirator with organic vapor cartridges or canister may be permissible under certain circumstances where airborne concentrations are or may be expected to exceed exposure limits or for odor or irritation. Protection provided by air-purifying respirators is limited. Refer to OSHA 29 CFR 1910.134, ANSI Z88.2-1992, NIOSH Respirator Decision Logic, and the manufacturer for additional guidance on respiratory protection selection.

Use a positive pressure, air-supplied respirator if there is a potential for uncontrolled release, exposure levels are not known, in oxygen-deficient atmospheres, or any other circumstance where an air-purifying respirator may not provide adequate protection.

9. PHYSICAL and CHEMICAL PROPERTIES (rev. Jul-98)

APPEARANCE

Red or reddish/orange colored (dyed) liquid

ODOR

Mild, petroleum distillate odor

BASIC PHYSICAL PROPERTIES

BOILING RANGE:	340 to 700 °F (171 to 371 °C)
VAPOR PRESSURE:	0.009 psia @ 70 °F (21 °C)
VAPOR DENSITY (air = 1):	> 1.0
SPECIFIC GRAVITY (H_2O = 1):	AP 0.87
PERCENT VOLATILES:	100 %
EVAPORATION RATE:	Slow; varies with conditions
SOLUBILITY (H_2O):	Negligible

10. STABILITY and REACTIVITY (rev. Sep-94)

STABILITY: Stable. Hazardous polymerization will not occur

CONDITIONS TO AVOID and INCOMPATIBLE MATERIALS

Avoid high temperatures, open flames, sparks, welding, smoking and other ignition sources. Keep away from strong oxidizers; Viton ®; Fluorel ®

HAZARDOUS DECOMPOSITION PRODUCTS

Carbon monoxide, carbon dioxide and non-combusted hydrocarbons (smoke).

11. TOXICOLOGICAL PROPERTIES (rev. Jan-98; Tox-98)

ACUTE TOXICITY

Acute Oral LD50 (rat): 14.5 ml/kg
Acute Dermal LD50 (rabbit): > 5 ml/kg
Guinea Pig Sensitization: negative
Primary dermal irritation: moderately irritating (Draize mean irritation score - 3.98 rabbits)
Draize eye irritation: mildly irritating (Draize score, 48 hours, unwashed - 2.0 rabbits)

CHRONIC EFFECTS AND CARCINOGENICITY

Carcinogenic: IARC: NO NTP: NO OSHA: NO ACGIH: 1997 NOIC: A3
Dermal carcinogenicity: positive - mice

Studies have shown that similar products produce skin tumors in laboratory animals following repeated applications without washing or removal. The significance of this finding to human exposure has not been determined. Other studies with active skin carcinogens have shown that washing the animal's skin with soap and water between applications reduced tumor formation.

This product is similar to Diesel Fuel. IARC classifies whole diesel fuel exhaust particulates as probably carcinogenic to humans (Group 2A) and NIOSH regards it as a potential cause of occupational lung cancer based on animal studies and limited evidence in humans.

MUTAGENICITY (genetic effects)

Material of similar composition has been positive in a mutagenicity study.

12. ECOLOGICAL INFORMATION (rev. Jan-98)

Keep out of sewers, drainage areas and waterways. Report spills and releases, as applicable, under Federal and State regulations.

13. DISPOSAL CONSIDERATIONS (rev. Jan-98)

Consult federal, state and local waste regulations to determine appropriate disposal options.

14. TRANSPORTATION INFORMATION (rev. Jan-98)

PROPER SHIPPING NAME:	FUEL OIL, NO. 2
HAZARD CLASS & PACKING GROUP:	3, PG III
DOT IDENTIFICATION NUMBER:	NA 1993
DOT SHIPPING LABEL:	FLAMMABLE LIQUID

May be reclassified for transportation as a COMBUSTIBLE LIQUID under conditions of DOT 49 CFR 173.120(b)(2).

15. REGULATORY INFORMATION (rev. Feb-01)

U.S. FEDERAL, STATE, and LOCAL REGULATORY INFORMATION

This product and its constituents listed herein are on the EPA TSCA Inventory. Any spill or uncontrolled release of this product, including any substantial threat of release, may be subject to federal, state and/or local reporting requirements. This product and/or its constituents may also be subject to other regulations at the state and/or local level. Consult those regulations applicable to your facility/operation.

CLEAN WATER ACT (OIL SPILLS)

Any spill or release of this product to "navigable waters" (essentially any surface water, including certain wetlands) or adjoining shorelines sufficient to cause a visible sheen or deposit of a sludge or emulsion must be reported immediately to the National Response Center (1-800-424-8802) or, if not practical, the U.S. Coast Guard with follow-up to the National Response Center, as required by U.S. Federal Law. Also contact appropriate state and local regulatory agencies as required.

CERCLA SECTION 103 and SARA SECTION 304 (RELEASE TO THE ENVIRONMENT)
The CERCLA definition of hazardous substances contains a "petroleum exclusion" clause which exempts crude oil, refined, and unrefined petroleum products and any indigenous components of such. However, other federal reporting requirements (e.g., SARA Section 304 as well as the Clean Water Act if the spill occurs on navigable waters) may still apply.

SARA SECTION 311/312 - HAZARD CLASSES

ACUTE HEALTH	CHRONIC HEALTH	FIRE	SUDDEN RELEASE OF PRESSURE	REACTIVE
X	X	X	--	--

SARA SECTION 313 - SUPPLIER NOTIFICATION
This product may contain listed chemicals below the *de minimis* levels which therefore are not subject to the supplier notification requirements of Section 313 of the Emergency Planning and Community Right-To-Know Act (EPCRA) of 1986 and of 40 CFR 372. If you may be required to report releases of chemicals listed in 40 CFR 372.28, you may contact Amerada Hess Corporate Safety if you require additional information regarding this product.

CANADIAN REGULATORY INFORMATION (WHMIS)
Class B, Division 3(Combustible Liquid); Class D, Division 2, Subdivision B (Toxic by other means)

16. OTHER INFORMATION (rev. Feb-01)

NFPA® HAZARD RATING	HEALTH:	0	Negligible
	FIRE:	2	Moderate
	REACTIVITY:	0	Negligible
HMIS® HAZARD RATING	HEALTH:	1 *	Slight
	FIRE:	2	Moderate
	REACTIVITY:	0	Negligible
			* Chronic

SUPERSEDES MSDS DATED: 09/03/98

ABBREVIATIONS:

AP = Approximately	< = Less than	> = Greater than
N/A = Not Applicable	N/D = Not Determined	ppm = parts per million

ACRONYMS:

ACGIH	American Conference of Governmental Industrial Hygienists	NFPA	National Fire Protection Association (617) 770-3000
AIHA	American Industrial Hygiene Association	NIOSH	National Institute of Occupational Safety and Health
ANSI	American National Standards Institute (212) 642-4900	NOIC	Notice of Intended Change (proposed change to ACGIH TLV)
API	American Petroleum Institute (202) 682-8000	NTP	National Toxicology Program
CERCLA	Comprehensive Emergency Response, Compensation, and Liability Act	OPA	Oil Pollution Act of 1990
DOT	U.S. Department of Transportation [General info: (800) 467-4922]	OSHA	U.S. Occupational Safety & Health Administration
EPA	U.S. Environmental Protection Agency	PEL	Permissible Exposure Limit (OSHA)
HMIS	Hazardous Materials Information System	RCRA	Resource Conservation and Recovery Act
IARC	International Agency For Research On Cancer	REL	Recommended Exposure Limit (NIOSH)
MSHA	Mine Safety and Health Administration	SARA	Superfund Amendments and Reauthorization Act of 1986 Title III
		SCBA	Self-Contained Breathing Apparatus

SPCC	Spill Prevention, Control, and Countermeasures
STEL	Short-Term Exposure Limit (generally 15 minutes)
TLV	Threshold Limit Value (ACGIH)
TSCA	Toxic Substances Control Act
TWA	Time Weighted Average (8 hr.)
WEEL	Workplace Environmental Exposure Level (AIHA)
WHMIS	Canadian Workplace Hazardous Materials Information System

Return to MSDS List , Previous MSDS , Next MSDS

MATERIAL SAFETY DATA SHEET

SECTION 1. Product and Company Identification
MINERAL OIL

Product Code: HH-MINERAL OIL
Product Name: MINERAL OIL **Chemical Family:** Compound

Manufacturer Name and Address:		Telephone Numbers:	Dates:
Distributed by:	CHEMTREC	(800)424-9300	Date Created: 10/04/1994
Farnam Companies, Inc.	District of Columbia	(202)483-0414	Revision: 06/26/2007
301 West Osborn Road	Farnam Companies, In	(800)234-2269	Printed: 06/29/2007
Phoenix, AZ.			
Additional Identity Information			
77601			

SECTION 2. Composition/Information on Ingredients
MINERAL OIL

	Hazardous Components (Chemical Name)	CAS #	Concentration
1.	MINERAL OIL USP	8042-47-5	90.0 -100.0 %

	OSHA PEL	ACGIH TLV
1.	No data.	No data.

SECTION 3. Hazards Identification
MINERAL OIL

Emergency Overview
No data available.
Route(s) of Entry: Inhalation? No , Skin? No , Eyes? No , Ingestion? Yes
Potential Health Effects (Acute and Chronic)
Under Manufacturing Conditions: On rare occasions, prolonged and repeated exposure to oil mist poses a risk of pulmonary disease such as chronic lung inflammation. This condition is usually asymptomatic as a result of repeated small aspirations. Shortness of breath and cough are the most common symptoms. Aspiration may lead to chemical pneumonitis which is characterized by pulmonary edema and hemorrage, and may be fatal. Signs of lung involvement include increased respiration rate, increased heart rate, and a bluish discoloration of the skin. Coughing, choking, and gagging are often noted at the time of aspiration. Gastrointestinal discomfort may develop, followed by vomiting, with a further risk of

aspiration.

Carcinogenicity: NTP? No , IARC Monographs? No , OSHA Regulated? No
Carcinogenicity/Other Information
No data available.
Signs and Symptoms Of Exposure
May cause slight eye irritation

Medical Conditions Generally Aggravated By Exposure
none known

SECTION 4. First Aid Measures
MINERAL OIL

Emergency and First Aid Procedures
IF INGESTED: Do NOT induce vomiting because of aspiration hazard. If victim is conscious,give 1 to 3 glasses of water or milk and contact physician or Poison Control Center. May act as laxative.
IF INHALED: Remove to fresh air. Administer respiration if indicated. If unconscious, seek medical attention.
IF IN EYES: Immediately flush with large amounts of water and continue flushing for 15 minutes. If material is hot, treat for thermal burns and take patient to hospital immediately.
IF ON SKIN: Remove contaminted clothing. If material is hot, submerge injured area in cold water. If patient is severely burned, remove to a hospital immediately.

Note to Physician
No data available.

SECTION 5. Fire Fighting Measures
MINERAL OIL

Flash Pt: 400.00 F **Method Used:** TCC
Explosive Limits: LEL: NE UEL: NE
Autoignition Pt: N.A. **Extinguishing Media**
dry chemical, foam, water spray, or carbon dioxide

Fire Fighting Instructions
Water may be ineffective but can be used to cool containers exposed to heat or flame. Caution should be exercised when using water or foam as frothing may occur, expecially if sprayed into containers of hot, burning liquid. Water runoff can cause environmental damage. Dike and collect water used to fight fire.

Flammable Properties and Hazards
Dense smoke may be generated while burning. Carbon monoxide, carbon dioxide and other oxides may be generated as products of combustion.

Hazardous Combustion Products
No data available.

SECTION 6. Accidental Release Measures
MINERAL OIL

Steps To Be Taken In Case Material Is Released Or Spilled
Contain spill immediately. Do not allow spill to enter sewers or watercourses. Remove all sources of ignition. Absorb with appropriate inert material such as sand, clay, etc.. Large spills may be picked up using vacumn pumps, shovels, buckets, or other means and placed in drums or other suitable containers.

SECTION 7. Handling and Storage
MINERAL OIL

Hazard Label Information:
Good general ventilation should be su Facilities storing or utilizing this
Precautions To Be Taken in Handling
Do not transfer to unmarked containers. Store in closed containers away from heat, sparks, open flame, or oxidizing materials. Flammable and combustible liquids.

Precautions To Be Taken in Storing
No data available.
Other Precautions
KEEP OUT OF REACH OF CHILDREN

SECTION 8. Exposure Controls/Personal Protection
MINERAL OIL

Respiratory Equipment (Specify Type)
none under normal use, NIOSH cert. OVR w/dust & mist filter

Eye Protection
Chemical goggles

Protective Gloves
Impervious gloves

Other Protective Clothing
Clothes to prevent skin contact

Engineering Controls (Ventilation etc.)
Local Exhaust: sufficient
Special:
Mechanical (Gen):
Other:

Work/Hygienic/Maintenance Practices
Wash hands before eating, smoking or using restroom.

SECTION 9. Physical and Chemical Properties
MINERAL OIL

Solubility Notes
Negligible

Physical States:	[ ] Gas , [X] Liquid , [ ] Solid
Boiling Point:	740.00 F
Melting Point:	N.A.
Specific Gravity (Water = 1):	0.840000 at 77.0 F
Density:	No data.
Vapor Pressure (vs. Air or mm Hg):	N.A.
Vapor Density (vs. Air = 1):	> AIR
Evaporation Rate (vs Butyl Acetate=1):	N.A.
Solubility in Water:	N.A.
Percent Volatile:	N.A.
Saturated Vapor Concentration:	No data.
Viscosity:	No data.
pH:	No data.

Appearance and Odor
Clear,light colored liquid

SECTION 10. Stability and Reactivity
MINERAL OIL

Stability: Unstable [ ] Stable [X]
Conditions To Avoid - Instability
none known

Incompatibility - Materials To Avoid
strong oxidizing agents

Hazardous Decomposition Or Byproducts
In fire conditions, CO, CO2, and reactive hydrocarbons may be produced.

Hazardous Polymerization: Will occur [ ] Will not occur [X]
Conditions To Avoid - Hazardous Polymerization
will not occur

SECTION 11. Toxicological Information
MINERAL OIL

No data available.

SECTION 12. Ecological Information
MINERAL OIL

No data available.

SECTION 13. Disposal Considerations
MINERAL OIL

Waste Disposal Method
Dispose of in accordance with local, State and Federal regulations.

SECTION 14. Transport Information
MINERAL OIL

DOT Proper Shipping Name
No data available.

DOT Hazard Label: None
UN/NA Number: No dat

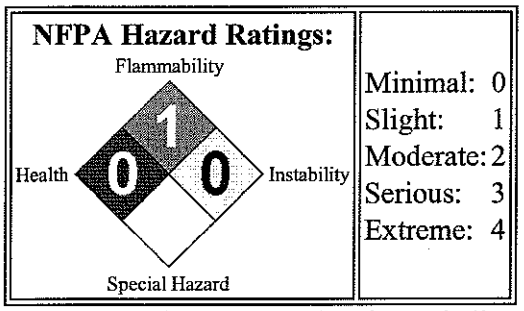
Additional Transport Information
No data available.

SECTION 15. Regulatory Information
MINERAL OIL

No data available.

SECTION 16. Other Information
MINERAL OIL

Supercedes Revision 04/25/2001



The information and data herein are believed to be accurate and have been compiled from sources believed to be reliable. It is offered for your consideration, investigation and verification.

FACTS faxed FAST! SM

OSHA-Required Health And Safety Information!

This Material Safety Data Sheet (MSDS) was requested moments ago from Hercules Automated Fax Information System. Please forward it immediately to the person in charge of MSDS's, or retain it at the machine until claimed.

Section 1

MATERIAL SAFETY DATA SHEET # 47

Hercules Lube Oil

HERCULES®

MATERIAL SAFETY INFORMATION SERVICE

Date Prepared: 6/18/1986 **Last Reviewed:** 7/29/2002

Meets OSHA 29 CFR 1910.1200

Hercules Chemical Company Inc.
111 South Street
Passaic NJ 07055
Phone (800) 221-9330
Fax (800) 333-3456

Section 2 - Hazardous Ingredients/Identity Information

Hazardous Components (Specific Chemical Identity; Common Name(s), CAS Numbers)	OSHA PEL	ACGIH TLV	Other Limits	Upper Bound Limit if SARA Reportable
This product is not considered hazardous under OSHA 29 CFR1910.1200				

HMIS Hazard Rating: 0 1 0 A

Section 3 - Physical/Chemical Characteristics

Boiling Point (°C):	Specific Gravity (H2O = 1):	Vapor Density (Air = 1):	Vapor Pressure (mm Hg):
N/D	0.88	N/D	N/D

Melting Point (° F)	Evaporation Rate: (Butyl Acetate = 1)	Solubility in Water:
N/D	N/D	Not soluble

Appearance And Color: Light Amber Liquid **Odor:** Mild petroleum

Section 4 - Fire And Explosion Hazard Data

Flash Point:	Flammable Limits:	LEL:	UEL:
(COC) 410	N/D	N/A	N/A

Extinguishing Media: Water spray, dry chemical, foam or carbon dioxide.

Special Firefighting Procedures:
Use water spray to cool fire-exposed containers. If spill or leak had not ignited, use water spray to disperse the vapors and to provide protection for persons attempting to stop the leak.

Unusual Fire And Explosion Hazards:
None

Continued on Next Page

Section 5 - Reactivity Data

Stability: Stable **Conditions To Avoid:** None

Incompatability (Materials To Avoid): Strong oxidizing agents.

Hazardous Decomposition: Carbon monoxide, carbon dioxide, aldehydes & ketones, combustible products of nitrogen and sulfur.

Hazardous Polymerization: Will Not Occur

Section 6 - Health Hazard Data

Routes of Entry: **Inhalation** YES/secondary **Skin** YES/primary **Ingestion** YES/secondary

Health Hazards:

None

Carcinogenicity: **NTP** NO **IARC** NO **OSHA Regulated** NO

Signs And Symptoms of Exposure:

None expected other than possible minimal irritant.

Medical Conditions Generally Aggravated By Exposure:

No appreciable effect.

Emergency And First Aid Procedures:

EYE CONTACT: As with most foreign materials, should eye contact occur, flush eyes with plenty of water. SKIN CONTACT: Wash with soap and water.

Continued on Next Page

Section 7 - Precautions For Safe Handling And Use:

Steps To Be Taken In Case Material Is Released Or Spilled:

Contain spill. Wipe up or absorb on suitable material or shovel up.

Waste Disposal Method:

Product does not have RCRA characteristics or meet the criteria of hazardous waste if discarded in its purchased form.

Precautions To Be Taken In Handling And Storing:

Minimum feasible handling temperatures should be maintained.

Other Precautions:

Periods of exposure to high temperatures should be minimized.

Section 8 - Control Measures:

Respiratory Protection:

For normal use, none required. If sprayed as a mist, use fume-mist respirator.

Ventilation: **Local Exhaust** Acceptable **Special** N/A
Mechanical N/A

Gloves: None required
Other: N/A

Eye Protection: Goggles

Other Protective Clothing: None required

Work/Hygienic Practices Wash thoroughly after handling.

AMSOIL Material Safety Data Sheet

Date Issued/Revised: January 16, 2009
Supersedes: March 28, 2006

Section 1: Product and Company Identification

Manufacturer: AMSOIL, Inc.
925 Tower Avenue
Superior, WI 54880

Telephone:
CHEMTREC (Spill Emergency Only): 1-800-424-9300
Information: 715-392-7101

Product Code	AWF ISO 15	AWG ISO 22	AWH ISO 32	AWI ISO 46	AWJ ISO 68	AWK ISO 100

Product Label Name ..... AW Hydraulic Oil
Product Use ..... LUBRICATING OIL

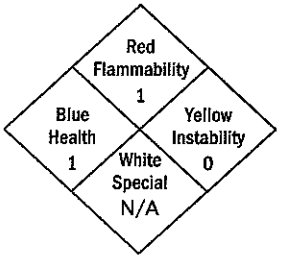
Section 2: Composition/Information on Ingredients

OSHA HAZARDOUS COMPONENTS (29 CFR 1910.1200)

This product is not formulated to contain ingredients that have exposure limits exceeding those established by US agencies.

*See Section 8 for exposure limits.

NFPA Rating



Section 3: Hazards Identification

POTENTIAL HEALTH EFFECTS: Minor eye, inhalation and skin irritant.

*See Section 11 for toxicological information.

Section 4: First Aid Measures

EYE: Flush with water for 15-20 minutes. Seek medical attention if irritation develops.

SKIN: Wash immediately with soap and water. Remove contaminated clothing and launder before reuse. Discard shoes and leather articles saturated with the product. Obtain medical advice if irritation occurs.

INHALATION: Remove exposed person to fresh air. If breathing is labored give oxygen. If breathing has stopped apply artificial respiration. Get immediate medical attention.

INGESTION: DO NOT INDUCE VOMITING. If conscious, give 2 glasses of water. If vomiting does occur, keep head below hips to reduce risk of aspiration. Get immediate medical attention.

Section 5: Fire Fighting Measures

FLAMMABILITY PROPERTIES:

	AWF ISO 15	AWG ISO 22	AWH ISO 32	AWI ISO 46	AWJ ISO 68	AWK ISO 100
Flash Point	341°F(172°C)	345°F(174°C)	442°F(228°C)	446°F(230°C)	459°F(237°C)	475°F (246°C)

Method ..... COC ASTM D-92
LFL/UFL ..... Not Determined
Auto-ignition Temperature ..... Not Determined

EXTINGUISHING MEDIA: Carbon dioxide, dry chemical, alcohol foam and water fog.

SPECIAL PROCEDURES: Water or foam may cause frothing. Use water to keep fire exposed surface cool. Water spray may be used to flush spills away from exposure. Prevent runoff from fire control or dilution from entering streams, sewers, or drinking water.

PROTECTIVE EQUIPMENT: For fires in enclosed areas, fire fighters must use self-contained breathing apparatus.

Section 6: Accidental Release Measures

Isolate spill area. Provide adequate ventilation. Wear appropriate personal protection. Recover free product for recycle and/or disposal. Add sand, earth or other suitable absorbent to spill area. Prevent entry into sewers and waterways. Check under Transportation and Labeling (DOT/CERCLA) and Other Regulator Information Section (SARA) for hazardous substances to determine regulatory reporting requirements for spill.

Section 7: Handling and Storage

HANDLING: Keep containers closed. Avoid contact with eyes, skin or clothing. Wash hands after handling. Empty container may retain product residue which may exhibit hazards of product.

STORAGE: Keep away from heat or flame.

Section 8: Exposure Controls/Personal Protection

VENTILATION: Use adequate general or local exhaust ventilation to keep airborne concentrations below exposure limits.

RESPIRATORY: Use a NIOSH approved respirator when necessary.

SKIN: Use Viton or Nitrile gloves to avoid prolonged or repeated skin contact.

EYE: Use splash goggles or face shield where splashing is expected or can occur.

EXPOSURE LIMITS: The Threshold Limit Value (TLV) of 5 mg/m^3 is suggested for oil mist.

Section 9: Physical and Chemical Properties

	AWF ISO 15	AWG ISO 22	AWH ISO 32	AWI ISO 46	AWJ ISO 68	AWK ISO 100
Physical State	Liquid					
Boiling Point	Not Determined					
Pour Point, °C	<-60	<-60	-51°	-47°C	-45°C	(-45°C)
Vapor Pressure	Not Determined					
Vapor Density (Air=1)	Negligible					
Evaporation Rate	Not Determined					
Solubility in Water	Negligible					
Specific Gravity (Water=1)	0.8229	0.8363	0.8408	0.8483	0.8514	0.8628
Density, lb./gal.	6.910	6.964	7.001	7.063	7.089	7.184
Volatility (Volume)	Negligible					
VOC	Unknown					
pH	Essentially Neutral					
Odor	Mild, Bland, Hydrocarbon Odor					
Odor Threshold	Not Determined					
Appearance	Light Straw Transparent Colored Liquid					
Viscosity, cSt @ 100°C	4.4	5.9	7.3	9.7	12.3	16.1
Viscosity, cSt @ 40°C	14.8	20.7	32.0	48.0	67.3	100.8
Viscosity Index	237	256	205	192	184	171

Section 10: Stability and Reactivity

STABILITY: Stable under moderately elevated temperatures and pressures.

INCOMPATIBILITY: Avoid contact with strong oxidants.

HAZARDOUS POLYMERIZATION: Will not occur.

HAZARDOUS DECOMPOSITION OF PRODUCT: Toxic oxides of carbon, aldehydes and other products of incomplete combustion.

Section 11: Toxicological Information

ACUTE EXPOSURE

Eye Irritation:	Moderate to strong eye irritation. Based on data from components or similar material.
Skin Irritation:	Not expected to be a primary skin irritant. Based on data from components or similar material. Prolonged or repeated skin contact as from clothing wet with material may cause dermatitis. Symptoms may include redness, edema, drying, defatting, and cracking of the skin.
Respiratory Irritation:	If material is misted or if vapors are generated from heating, exposure may cause irritation of mucous membranes and the upper respiratory tract similar to that observed with mineral oil. Based on data from components or similar materials. Under good industrial hygiene practices where all exposure limits are observed, respiratory irritation should not be a problem.

CHRONIC EXPOSURE

Chronic Toxicity:	No data available to indicate product present at greater than 1.0% are chronic health hazards.
Carcinogenicity:	No data available to indicate product present at greater than 0.1% are a carcinogenic hazard.
Mutagenicity:	No data available to indicate product present at greater than 1.0% present a mutagenic or genotoxic hazard.
Reproductive Toxicity:	No data available to indicate product present at greater than 1.0% present a reproductive hazard.
Teratogenicity:	No data available to indicate product present at greater than 1.0% present a teratogenic hazards.

ADDITIONAL INFORMATION

Exposure Limits:	Under conditions which may generate mists, observe the OSHA PEL of 5 mg per cubic meter.

Section 12: Ecological Information

No data available on the adverse effects of this product on the environment.

Section 13: Disposal Considerations

If this product as supplied becomes a waste, it does not meet the criteria of a hazardous waste as defined under the Resource Conservation and Recovery Act (RCRA) 40 CFR 261.

Section 14: Transport Information

This product is not classified as hazardous material for DOT shipping. For further information relative to spills resulting from transportation incidents, refer to the latest DOT Emergency Response Guidebook for Hazardous Materials.

Section 15: Regulatory Information

U.S. Federal Regulations
- OSHA Table Z ..... Synthetic Base Stock(mist)
- TSCA ..... All Components Listed
- CERCLA 40 CFR 302.4 ..... Not Applicable
- SARA Title III
  - Section 302 Extremely Hazardous ..... Not Applicable
  - Section 311/312
    - Fire Hazard ..... Yes
    - Reactive Hazard ..... No
    - Release of Pressure ..... No
    - Acute Health Hazard ..... Yes
    - Chronic Health Hazard ..... No
  - Section 313 Toxic Chemical ..... Not Applicable

U.S. State Regulations
- California (Prop 65)
  - Does not contain chemicals known to the state of California to cause cancer.

International Regulations
- WHMIS ..... All components listed

Section 16: Other Information

The information and recommendations contained herein are, to the best of AMSOIL's knowledge and belief, accurate and reliable as of the date issued. AMSOIL makes no warranty or guarantee, expressed or implied, of their accuracy or reliability, and AMSOIL shall not be liable for any loss or damage based upon the criteria supplied by the developers of these rating systems, together with AMSOIL's interpretation of the available data.

RGP NOI Dilution Calculation
355 Main Street
Northbridge, MA
May 26, 2009

Blackstone River
Northbridge, MA

DF = (Qd+ Qs)/Qd

DF= Dilution Factor
Qd= Maximum Flow rate of discharge in cubic feet per second (cfs)
Qs= Receiving water 7Q10 flow (cfs) where,
7Q10 = The minimum flow (cfs) for 7 consectuve days with a recurrence interval for 10 years

The total drainage area of Blackstone River is 139 square miles. Pursuant to MA DEP Correspondence, in cases where 7Q10 can not be easily obtained, it can be estimated with some certainty using the factor 0.1 cfs/sq/ mile of drainage area.

Therefore,

DF= (0.22 + 13.9)/0.22

DF= 64.18

ALPHA ANALYTICAL

ANALYTICAL REPORT

Lab Number:	L0906386
Client:	Triumvirate Environmental, Inc. 61 Inner Belt Road Somerville, MA 02143
ATTN:	Mike Bricher
Project Name:	PERFORMANCE CONTRACTING
Project Number:	60590
Report Date:	05/26/09

Certifications & Approvals: MA (M-MA086), NY NELAC (11148), CT (PH-0574), NH (2003), NJ (MA935), RI (LAO00065), ME (MA0086), PA (Registration #68-03671), USDA (Permit #S-72578), US Army Corps of Engineers, Naval FESC.

Eight Walkup Drive, Westborough, MA 01581-1019
508-898-9220 (Fax) 508-898-9193 800-624-9220 - www.alphalab.com

Project Name: PERFORMANCE CONTRACTING
Project Number: 60590

Lab Number: L0906386
Report Date: 05/26/09

Alpha Sample ID	Client ID	Sample Location	Collection Date/Time
L0906386-01	GROUNDWATER	225 MAIN STREET, NORTHBRIDGE	05/19/09 16:00
L0906386-02	TRIP BLANK	225 MAIN STREET, NORTHBRIDGE	05/19/09 00:00

Project Name:	PERFORMANCE CONTRACTING	**Lab Number:**	L0906386
Project Number:	60590	**Report Date:**	05/26/09

Case Narrative

The samples were received in accordance with the Chain of Custody and no significant deviations were encountered during the preparation or analysis unless otherwise noted. Sample Receipt, Container Information, and the Chain of Custody are located at the back of the report.

Results contained within this report relate only to the samples submitted under this Alpha Lab Number and meet all of the requirements of NELAC, for all NELAC accredited parameters. The data presented in this report is organized by parameter (i.e. VOC, SVOC, etc.). Sample specific Quality Control data (i.e. Surrogate Spike Recovery) is reported at the end of the target analyte list for each individual sample, followed by the Laboratory Batch Quality Control at the end of each parameter. If a sample was re-analyzed or re-extracted due to a required quality control corrective action and if both sets of data are reported, the Laboratory ID of the re-analysis or re-extraction is designated with an "R" or "RE", respectively. When multiple Batch Quality Control elements are reported (e.g. more than one LCS), the associated samples for each element are noted in the grey shaded header line of each data table. Any Laboratory Batch, Sample Specific % recovery or RPD value that is outside the listed Acceptance Criteria is bolded in the report.

Please see the associated ADEx data file for a comparison of laboratory reporting limits that were achieved with the regulatory Numerical Standards requested on the Chain of Custody.

For additional information, please contact Client Services at 800-624-9220.

Report Submission

This report replaces the report issued on May 22, 2009. The report has been amended to include the results for Tert-Butyl Alcohol, Tertiary-Amyl-Methyl-Ether, and 1,4-Dioxane by method 8260B.

Sample Receipt

The samples were received at the laboratory above the required temperature range. The samples were transported to the laboratory in a cooler with ice and delivered directly from the sampling site.

Project Name:	PERFORMANCE CONTRACTING	**Lab Number:**	L0906386
Project Number:	60590	**Report Date:**	05/26/09

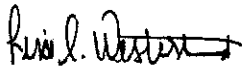
Case Narrative (continued)

A Trip Blank was received in the laboratory but not listed on the Chain of Custody. At the client's request, the Trip Blank was not analyzed.
The sample was received without the container for total metals analysis. An aliquot was taken from an unpreserved container and preserved appropriately.

Semivolatile Organics
The WG363533-2 LCS recovery associated with L0906386-01 was above the acceptance criteria for 2,4-Dinitrotoluene (98%); however, the associated sample was non-detect for this target compound. The results of the original analysis are reported.

Dissolved Metals
The WG363433-4 MS recovery for Iron (140%) is invalid because the sample concentration is greater than four times the spike amount added.

I, the undersigned, attest under the pains and penalties of perjury that, to the best of my knowledge and belief and based upon my personal inquiry of those responsible for providing the information contained in this analytical report, such information is accurate and complete. This certificate of analysis is not complete unless this page accompanies any and all pages of this report.

Authorized Signature: 

Title: Technical Director/Representative Date: 05/26/09

ORGANICS

VOLATILES

Project Name: PERFORMANCE CONTRACTING **Lab Number:** L0906386

Project Number: 60590 **Report Date:** 05/26/09

SAMPLE RESULTS

Lab ID:	L0906386-01	Date Collected:	05/19/09 16:00
Client ID:	GROUNDWATER	Date Received:	05/19/09
Sample Location:	225 MAIN STREET, NORTHBRIDGE	Field Prep:	Not Specified
Matrix:	Water		
Analytical Method:	1,8260B		
Analytical Date:	05/20/09 22:51		
Analyst:	GK		

Parameter	Result	Qualifier	Units	RDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab					
Methylene chloride	ND		ug/l	3.0	1
1,1-Dichloroethane	ND		ug/l	0.75	1
Chloroform	ND		ug/l	0.75	1
Carbon tetrachloride	ND		ug/l	0.50	1
1,2-Dichloropropane	ND		ug/l	1.8	1
Dibromochloromethane	ND		ug/l	0.50	1
1,1,2-Trichloroethane	ND		ug/l	0.75	1
Tetrachloroethene	ND		ug/l	0.50	1
Chlorobenzene	ND		ug/l	0.50	1
Trichlorofluoromethane	ND		ug/l	2.5	1
1,2-Dichloroethane	ND		ug/l	0.50	1
1,1,1-Trichloroethane	ND		ug/l	0.50	1
Bromodichloromethane	ND		ug/l	0.50	1
trans-1,3-Dichloropropene	ND		ug/l	0.50	1
cis-1,3-Dichloropropene	ND		ug/l	0.50	1
1,1-Dichloropropene	ND		ug/l	2.5	1
Bromoform	ND		ug/l	2.0	1
1,1,2,2-Tetrachloroethane	ND		ug/l	0.50	1
Benzene	ND		ug/l	0.50	1
Toluene	ND		ug/l	0.75	1
Ethylbenzene	ND		ug/l	0.50	1
Chloromethane	ND		ug/l	2.5	1
Bromomethane	ND		ug/l	1.0	1
Vinyl chloride	ND		ug/l	1.0	1
Chloroethane	ND		ug/l	1.0	1
1,1-Dichloroethene	ND		ug/l	0.50	1
trans-1,2-Dichloroethene	ND		ug/l	0.75	1
Trichloroethene	ND		ug/l	0.50	1
1,2-Dichlorobenzene	ND		ug/l	2.5	1
1,3-Dichlorobenzene	ND		ug/l	2.5	1

Project Name: PERFORMANCE CONTRACTING **Lab Number:** L0906386

Project Number: 60590 **Report Date:** 05/26/09

SAMPLE RESULTS

Lab ID: L0906386-01 Date Collected: 05/19/09 16:00

Client ID: GROUNDWATER Date Received: 05/19/09

Sample Location: 225 MAIN STREET, NORTHBRIDGE Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab					
1,4-Dichlorobenzene	ND		ug/l	2.5	1
Methyl tert butyl ether	ND		ug/l	1.0	1
p/m-Xylene	ND		ug/l	1.0	1
o-Xylene	ND		ug/l	1.0	1
cis-1,2-Dichloroethene	ND		ug/l	0.50	1
Dibromomethane	ND		ug/l	5.0	1
1,4-Dichlorobutane	ND		ug/l	5.0	1
1,2,3-Trichloropropane	ND		ug/l	5.0	1
Styrene	ND		ug/l	1.0	1
Dichlorodifluoromethane	ND		ug/l	5.0	1
Acetone	ND		ug/l	5.0	1
Carbon disulfide	ND		ug/l	5.0	1
2-Butanone	ND		ug/l	5.0	1
Vinyl acetate	ND		ug/l	5.0	1
4-Methyl-2-pentanone	ND		ug/l	5.0	1
2-Hexanone	ND		ug/l	5.0	1
Ethyl methacrylate	ND		ug/l	5.0	1
Acrylonitrile	ND		ug/l	5.0	1
Bromochloromethane	ND		ug/l	2.5	1
Tetrahydrofuran	ND		ug/l	10	1
2,2-Dichloropropane	ND		ug/l	2.5	1
1,2-Dibromoethane	ND		ug/l	2.0	1
1,3-Dichloropropane	ND		ug/l	2.5	1
1,1,1,2-Tetrachloroethane	ND		ug/l	0.50	1
Bromobenzene	ND		ug/l	2.5	1
n-Butylbenzene	ND		ug/l	0.50	1
sec-Butylbenzene	ND		ug/l	0.50	1
tert-Butylbenzene	ND		ug/l	2.5	1
o-Chlorotoluene	ND		ug/l	2.5	1
p-Chlorotoluene	ND		ug/l	2.5	1
1,2-Dibromo-3-chloropropane	ND		ug/l	2.5	1
Hexachlorobutadiene	ND		ug/l	0.50	1
Isopropylbenzene	ND		ug/l	0.50	1
p-Isopropyltoluene	ND		ug/l	0.50	1
Naphthalene	ND		ug/l	2.5	1
n-Propylbenzene	ND		ug/l	0.50	1
1,2,3-Trichlorobenzene	ND		ug/l	2.5	1

Project Name: PERFORMANCE CONTRACTING **Lab Number:** L0906386

Project Number: 60590 **Report Date:** 05/26/09

SAMPLE RESULTS

Lab ID: L0906386-01 Date Collected: 05/19/09 16:00

Client ID: GROUNDWATER Date Received: 05/19/09

Sample Location: 225 MAIN STREET, NORTHBRIDGE Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab					
1,2,4-Trichlorobenzene	ND		ug/l	2.5	1
1,3,5-Trimethylbenzene	ND		ug/l	2.5	1
1,2,4-Trimethylbenzene	ND		ug/l	2.5	1
trans-1,4-Dichloro-2-butene	ND		ug/l	2.5	1
Ethyl ether	ND		ug/l	2.5	1
Tert-Butyl Alcohol	ND		ug/l	30	1
Tertiary-Amyl Methyl Ether	ND		ug/l	2.0	1
1,4-Dioxane	ND		ug/l	250	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	122		70-130
Toluene-d8	105		70-130
4-Bromofluorobenzene	116		70-130
Dibromofluoromethane	104		70-130

Project Name: PERFORMANCE CONTRACTING **Lab Number:** L0906386

Project Number: 60590 **Report Date:** 05/26/09

SAMPLE RESULTS

Lab ID:	L0906386-01	Date Collected:	05/19/09 16:00
Client ID:	GROUNDWATER	Date Received:	05/19/09
Sample Location:	225 MAIN STREET, NORTHBRIDGE	Field Prep:	Not Specified
Matrix:	Water		
Analytical Method:	14,504.1		
Analytical Date:	05/21/09 13:41		
Analyst:	JB		

Parameter	Result	Qualifier	Units	RDL	Dilution Factor
Pesticides by GC - Westborough Lab					
1,2-Dibromoethane	ND		ug/l	0.019	1

Project Name:	PERFORMANCE CONTRACTING	**Lab Number:**	L0906386
Project Number:	60590	**Report Date:**	05/26/09

Method Blank Analysis
Batch Quality Control

Analytical Method: 14,504.1
Analytical Date: 05/21/09 13:03
Analyst: JB

Parameter	Result	Qualifier	Units	RDL
Pesticides by GC - Westborough Lab for sample(s): 01 Batch: WG363415-1				
1,2-Dibromoethane	ND		ug/l	0.020

Project Name: PERFORMANCE CONTRACTING **Lab Number:** L0906386

Project Number: 60590 **Report Date:** 05/26/09

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8260B
Analytical Date: 05/20/09 14:45
Analyst: GK

Parameter	Result	Qualifier	Units	RDL
Volatile Organics by GC/MS - Westborough Lab for sample(s): 01 Batch: WG363439-3				
Methylene chloride	ND		ug/l	3.0
1,1-Dichloroethane	ND		ug/l	0.75
Chloroform	ND		ug/l	0.75
Carbon tetrachloride	ND		ug/l	0.50
1,2-Dichloropropane	ND		ug/l	1.8
Dibromochloromethane	ND		ug/l	0.50
1,1,2-Trichloroethane	ND		ug/l	0.75
Tetrachloroethene	ND		ug/l	0.50
Chlorobenzene	ND		ug/l	0.50
Trichlorofluoromethane	ND		ug/l	2.5
1,2-Dichloroethane	ND		ug/l	0.50
1,1,1-Trichloroethane	ND		ug/l	0.50
Bromodichloromethane	ND		ug/l	0.50
trans-1,3-Dichloropropene	ND		ug/l	0.50
cis-1,3-Dichloropropene	ND		ug/l	0.50
1,1-Dichloropropene	ND		ug/l	2.5
Bromoform	ND		ug/l	2.0
1,1,2,2-Tetrachloroethane	ND		ug/l	0.50
Benzene	ND		ug/l	0.50
Toluene	ND		ug/l	0.75
Ethylbenzene	ND		ug/l	0.50
Chloromethane	ND		ug/l	2.5
Bromomethane	ND		ug/l	1.0
Vinyl chloride	ND		ug/l	1.0
Chloroethane	ND		ug/l	1.0
1,1-Dichloroethene	ND		ug/l	0.50
trans-1,2-Dichloroethene	ND		ug/l	0.75
Trichloroethene	ND		ug/l	0.50
1,2-Dichlorobenzene	ND		ug/l	2.5
1,3-Dichlorobenzene	ND		ug/l	2.5
1,4-Dichlorobenzene	ND		ug/l	2.5

Project Name: PERFORMANCE CONTRACTING **Lab Number:** L0906386

Project Number: 60590 **Report Date:** 05/26/09

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8260B
Analytical Date: 05/20/09 14:45
Analyst: GK

Parameter	Result	Qualifier	Units	RDL
Volatile Organics by GC/MS - Westborough Lab for sample(s): 01 Batch: WG363439-3				
Methyl tert butyl ether	ND		ug/l	1.0
p/m-Xylene	ND		ug/l	1.0
o-Xylene	ND		ug/l	1.0
cis-1,2-Dichloroethene	ND		ug/l	0.50
Dibromomethane	ND		ug/l	5.0
1,4-Dichlorobutane	ND		ug/l	5.0
1,2,3-Trichloropropane	ND		ug/l	5.0
Styrene	ND		ug/l	1.0
Dichlorodifluoromethane	ND		ug/l	5.0
Acetone	ND		ug/l	5.0
Carbon disulfide	ND		ug/l	5.0
2-Butanone	ND		ug/l	5.0
Vinyl acetate	ND		ug/l	5.0
4-Methyl-2-pentanone	ND		ug/l	5.0
2-Hexanone	ND		ug/l	5.0
Ethyl methacrylate	ND		ug/l	5.0
Acrylonitrile	ND		ug/l	5.0
Bromochloromethane	ND		ug/l	2.5
Tetrahydrofuran	ND		ug/l	10
2,2-Dichloropropane	ND		ug/l	2.5
1,2-Dibromoethane	ND		ug/l	2.0
1,3-Dichloropropane	ND		ug/l	2.5
1,1,1,2-Tetrachloroethane	ND		ug/l	0.50
Bromobenzene	ND		ug/l	2.5
n-Butylbenzene	ND		ug/l	0.50
sec-Butylbenzene	ND		ug/l	0.50
tert-Butylbenzene	ND		ug/l	2.5
o-Chlorotoluene	ND		ug/l	2.5
p-Chlorotoluene	ND		ug/l	2.5
1,2-Dibromo-3-chloropropane	ND		ug/l	2.5
Hexachlorobutadiene	ND		ug/l	0.50

Project Name: PERFORMANCE CONTRACTING **Lab Number:** L0906386

Project Number: 60590 **Report Date:** 05/26/09

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8260B
Analytical Date: 05/20/09 14:45
Analyst: GK

Parameter	Result	Qualifier	Units	RDL
Volatile Organics by GC/MS - Westborough Lab for sample(s): 01 Batch: WG363439-3				
Isopropylbenzene	ND		ug/l	0.50
p-Isopropyltoluene	ND		ug/l	0.50
Naphthalene	ND		ug/l	2.5
n-Propylbenzene	ND		ug/l	0.50
1,2,3-Trichlorobenzene	ND		ug/l	2.5
1,2,4-Trichlorobenzene	ND		ug/l	2.5
1,3,5-Trimethylbenzene	ND		ug/l	2.5
1,2,4-Trimethylbenzene	ND		ug/l	2.5
trans-1,4-Dichloro-2-butene	ND		ug/l	2.5
Ethyl ether	ND		ug/l	2.5
Tert-Butyl Alcohol	ND		ug/l	30
Tertiary-Amyl Methyl Ether	ND		ug/l	2.0
1,4-Dioxane	ND		ug/l	250

Surrogate	%Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	117		70-130
Toluene-d8	100		70-130
4-Bromofluorobenzene	118		70-130
Dibromofluoromethane	104		70-130

Lab Control Sample Analysis

Batch Quality Control

Project Name: PERFORMANCE CONTRACTING
Project Number: 60590
Lab Number: L0906386
Report Date: 05/26/09

Parameter	LCS %Recovery	LCSD %Recovery	%Recovery Limits	RPD	RPD Limits
Pesticides by GC - Westborough Lab Associated sample(s): 01 Batch: WG363415-2					
1,2-Dibromoethane	73	-	70-130	-	20
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 01 Batch: WG363439-1 WG363439-2					
Chlorobenzene	99	95	75-130	4	20
Benzene	100	98	76-127	2	20
Toluene	99	95	76-125	4	20
1,1-Dichloroethene	102	98	61-145	4	20
Trichloroethene	102	96	71-120	6	20

Lab Control Sample Analysis

Batch Quality Control

Project Name: PERFORMANCE CONTRACTING
Project Number: 60590

Lab Number: L0906386
Report Date: 05/26/09

Parameter	LCS %Recovery	LCSD %Recovery	%Recovery Limits	RPD	RPD Limits

Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 01 Batch: WG363439-1 WG363439-2

Surrogate	LCS %Recovery	Qualifier	LCSD %Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	120		113		70-130
Toluene-d8	101		102		70-130
4-Bromofluorobenzene	98		103		70-130
Dibromofluoromethane	104		106		70-130

Matrix Spike Analysis
Batch Quality Control

Project Name: PERFORMANCE CONTRACTING
Project Number: 60590

Lab Number: L0906386
Report Date: 05/26/09

Parameter	Native Sample	MS Added	MS Found	MS %Recovery	MSD Found	MSD %Recovery	Recovery Limits	RPD	RPD Limits
Pesticides by GC - Westborough Lab Associated sample(s): 01 QC Batch ID: WG363415-3 QC Sample: L0906386-01 Client ID: GROUNDWATER									
1,2-Dibromoethane	ND	0.241	0.188	78	-	-	70-130	-	20

SEMIVOLATILES

Project Name: PERFORMANCE CONTRACTING **Lab Number:** L0906386

Project Number: 60590 **Report Date:** 05/26/09

SAMPLE RESULTS

Lab ID:	L0906386-01	Date Collected:	05/19/09 16:00
Client ID:	GROUNDWATER	Date Received:	05/19/09
Sample Location:	225 MAIN STREET, NORTHBRIDGE	Field Prep:	Not Specified
Matrix:	Water	Extraction Method:	EPA 3510C
Analytical Method:	1,8270C	Extraction Date:	05/20/09 07:08
Analytical Date:	05/21/09 13:19		
Analyst:	HL		

Parameter	Result	Qualifier	Units	RDL	Dilution Factor
Semivolatile Organics by GC/MS-SIM - Westborough Lab					
Acenaphthene	0.25		ug/l	0.20	1
Fluoranthene	0.29		ug/l	0.20	1
Naphthalene	ND		ug/l	0.20	1
Benzo(a)anthracene	ND		ug/l	0.20	1
Benzo(a)pyrene	ND		ug/l	0.20	1
Benzo(b)fluoranthene	ND		ug/l	0.20	1
Benzo(k)fluoranthene	ND		ug/l	0.20	1
Chrysene	ND		ug/l	0.20	1
Acenaphthylene	ND		ug/l	0.20	1
Anthracene	ND		ug/l	0.20	1
Benzo(ghi)perylene	ND		ug/l	0.20	1
Fluorene	ND		ug/l	0.20	1
Phenanthrene	ND		ug/l	0.20	1
Dibenzo(a,h)anthracene	ND		ug/l	0.20	1
Indeno(1,2,3-cd)Pyrene	ND		ug/l	0.20	1
Pyrene	0.29		ug/l	0.20	1
Pentachlorophenol	ND		ug/l	0.80	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	43		21-120
Phenol-d6	29		10-120
Nitrobenzene-d5	65		23-120
2-Fluorobiphenyl	18		15-120
2,4,6-Tribromophenol	118		10-120
4-Terphenyl-d14	90		33-120

Project Name: PERFORMANCE CONTRACTING **Lab Number:** L0906386

Project Number: 60590 **Report Date:** 05/26/09

SAMPLE RESULTS

Lab ID:	L0906386-01	Date Collected:	05/19/09 16:00
Client ID:	GROUNDWATER	Date Received:	05/19/09
Sample Location:	225 MAIN STREET, NORTHBRIDGE	Field Prep:	Not Specified
Matrix:	Water	Extraction Method:	EPA 3510C
Analytical Method:	1,8270C	Extraction Date:	05/22/09 07:28
Analytical Date:	05/22/09 15:12		
Analyst:	AK		

Parameter	Result	Qualifier	Units	RDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab					
Bis(2-Ethylhexyl)phthalate	ND		ug/l	5.0	1
Butyl benzyl phthalate	ND		ug/l	5.0	1
Di-n-butylphthalate	ND		ug/l	5.0	1
Di-n-octylphthalate	ND		ug/l	5.0	1
Diethyl phthalate	ND		ug/l	5.0	1
Dimethyl phthalate	ND		ug/l	5.0	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
Nitrobenzene-d5	60		23-120
2-Fluorobiphenyl	65		15-120
4-Terphenyl-d14	104		33-120

Project Name: PERFORMANCE CONTRACTING **Lab Number:** L0906386

Project Number: 60590 **Report Date:** 05/26/09

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8270C
Analytical Date: 05/21/09 11:49
Analyst: HL

Extraction Method: EPA 3510C
Extraction Date: 05/20/09 07:08

Parameter	Result	Qualifier	Units	RDL
Semivolatile Organics by GC/MS-SIM - Westborough Lab for sample(s): 01 Batch: WG363130-1				
Acenaphthene	ND		ug/l	0.20
2-Chloronaphthalene	ND		ug/l	0.20
Fluoranthene	ND		ug/l	0.20
Hexachlorobutadiene	ND		ug/l	0.50
Naphthalene	ND		ug/l	0.20
Benzo(a)anthracene	ND		ug/l	0.20
Benzo(a)pyrene	ND		ug/l	0.20
Benzo(b)fluoranthene	ND		ug/l	0.20
Benzo(k)fluoranthene	ND		ug/l	0.20
Chrysene	ND		ug/l	0.20
Acenaphthylene	ND		ug/l	0.20
Anthracene	ND		ug/l	0.20
Benzo(ghi)perylene	ND		ug/l	0.20
Fluorene	ND		ug/l	0.20
Phenanthrene	ND		ug/l	0.20
Dibenzo(a,h)anthracene	ND		ug/l	0.20
Indeno(1,2,3-cd)Pyrene	ND		ug/l	0.20
Pyrene	ND		ug/l	0.20
2-Methylnaphthalene	ND		ug/l	0.20
Pentachlorophenol	ND		ug/l	0.80
Hexachlorobenzene	ND		ug/l	0.80
Hexachloroethane	ND		ug/l	0.80

Project Name: PERFORMANCE CONTRACTING **Lab Number:** L0906386

Project Number: 60590 **Report Date:** 05/26/09

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8270C
Analytical Date: 05/21/09 11:49
Analyst: HL

Extraction Method: EPA 3510C
Extraction Date: 05/20/09 07:08

Parameter	Result	Qualifier	Units	RDL
Semivolatile Organics by GC/MS-SIM - Westborough Lab for sample(s): 01 Batch: WG363130-1				

Surrogate	%Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	55		21-120
Phenol-d6	36		10-120
Nitrobenzene-d5	81		23-120
2-Fluorobiphenyl	67		15-120
2,4,6-Tribromophenol	101		10-120
4-Terphenyl-d14	93		33-120

Project Name: PERFORMANCE CONTRACTING **Lab Number:** L0906386

Project Number: 60590 **Report Date:** 05/26/09

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8270C
Analytical Date: 05/22/09 13:39
Analyst: AK

Extraction Method: EPA 3510C
Extraction Date: 05/22/09 07:28

Parameter	Result	Qualifier	Units	RDL
Semivolatile Organics by GC/MS - Westborough Lab for sample(s): 01 Batch: WG363533-1				
Acenaphthene	ND		ug/l	5.0
Benzidine	ND		ug/l	50
1,2,4-Trichlorobenzene	ND		ug/l	5.0
Hexachlorobenzene	ND		ug/l	5.0
Bis(2-chloroethyl)ether	ND		ug/l	5.0
2-Chloronaphthalene	ND		ug/l	6.0
1,2-Dichlorobenzene	ND		ug/l	5.0
1,3-Dichlorobenzene	ND		ug/l	5.0
1,4-Dichlorobenzene	ND		ug/l	5.0
3,3'-Dichlorobenzidine	ND		ug/l	50
2,4-Dinitrotoluene	ND		ug/l	6.0
2,6-Dinitrotoluene	ND		ug/l	5.0
Azobenzene	ND		ug/l	5.0
Fluoranthene	ND		ug/l	5.0
4-Chlorophenyl phenyl ether	ND		ug/l	5.0
4-Bromophenyl phenyl ether	ND		ug/l	5.0
Bis(2-chloroisopropyl)ether	ND		ug/l	5.0
Bis(2-chloroethoxy)methane	ND		ug/l	5.0
Hexachlorobutadiene	ND		ug/l	10
Hexachlorocyclopentadiene	ND		ug/l	30
Hexachloroethane	ND		ug/l	5.0
Isophorone	ND		ug/l	5.0
Naphthalene	ND		ug/l	5.0
Nitrobenzene	ND		ug/l	5.0
NitrosoDiPhenylAmine(NDPA)/DPA	ND		ug/l	15
Bis(2-Ethylhexyl)phthalate	ND		ug/l	5.0
Butyl benzyl phthalate	ND		ug/l	5.0
Di-n-butylphthalate	ND		ug/l	5.0
Di-n-octylphthalate	ND		ug/l	5.0
Diethyl phthalate	ND		ug/l	5.0
Dimethyl phthalate	ND		ug/l	5.0

Project Name: PERFORMANCE CONTRACTING **Lab Number:** L0906386

Project Number: 60590 **Report Date:** 05/26/09

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8270C
Analytical Date: 05/22/09 13:39
Analyst: AK

Extraction Method: EPA 3510C
Extraction Date: 05/22/09 07:28

Parameter	Result	Qualifier	Units	RDL
Semivolatile Organics by GC/MS - Westborough Lab for sample(s): 01 Batch: WG363533-1				
Benzo(a)anthracene	ND		ug/l	5.0
Benzo(a)pyrene	ND		ug/l	5.0
Benzo(b)fluoranthene	ND		ug/l	5.0
Benzo(k)fluoranthene	ND		ug/l	5.0
Chrysene	ND		ug/l	5.0
Acenaphthylene	ND		ug/l	5.0
Anthracene	ND		ug/l	5.0
Benzo(ghi)perylene	ND		ug/l	5.0
Fluorene	ND		ug/l	5.0
Phenanthrene	ND		ug/l	5.0
Dibenzo(a,h)anthracene	ND		ug/l	5.0
Indeno(1,2,3-cd)Pyrene	ND		ug/l	7.0
Pyrene	ND		ug/l	5.0
Aniline	ND		ug/l	20
4-Chloroaniline	ND		ug/l	5.0
1-Methylnaphthalene	ND		ug/l	5.0
2-Nitroaniline	ND		ug/l	5.0
3-Nitroaniline	ND		ug/l	5.0
4-Nitroaniline	ND		ug/l	7.0
Dibenzofuran	ND		ug/l	5.0
2-Methylnaphthalene	ND		ug/l	5.0
n-Nitrosodimethylamine	ND		ug/l	50
2,4,6-Trichlorophenol	ND		ug/l	5.0
P-Chloro-M-Cresol	ND		ug/l	5.0
2-Chlorophenol	ND		ug/l	6.0
2,4-Dichlorophenol	ND		ug/l	10
2,4-Dimethylphenol	ND		ug/l	10
2-Nitrophenol	ND		ug/l	20
4-Nitrophenol	ND		ug/l	10
2,4-Dinitrophenol	ND		ug/l	30
4,6-Dinitro-o-cresol	ND		ug/l	20

Project Name: PERFORMANCE CONTRACTING **Lab Number:** L0906386

Project Number: 60590 **Report Date:** 05/26/09

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8270C
Analytical Date: 05/22/09 13:39
Analyst: AK

Extraction Method: EPA 3510C
Extraction Date: 05/22/09 07:28

Parameter	Result	Qualifier	Units	RDL
Semivolatile Organics by GC/MS - Westborough Lab for sample(s): 01 Batch: WG363533-1				
Pentachlorophenol	ND		ug/l	10
Phenol	ND		ug/l	7.0
2-Methylphenol	ND		ug/l	6.0
3-Methylphenol/4-Methylphenol	ND		ug/l	6.0
2,4,5-Trichlorophenol	ND		ug/l	5.0
Benzoic Acid	ND		ug/l	50
Benzyl Alcohol	ND		ug/l	10
Carbazole	ND		ug/l	5.0
Pyridine	ND		ug/l	50

Surrogate	%Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	57		21-120
Phenol-d6	38		10-120
Nitrobenzene-d5	81		23-120
2-Fluorobiphenyl	75		15-120
2,4,6-Tribromophenol	94		10-120
4-Terphenyl-d14	113		33-120

Lab Control Sample Analysis

Batch Quality Control

Project Name: PERFORMANCE CONTRACTING
Project Number: 60590
Lab Number: L0906386
Report Date: 05/26/09

Parameter	LCS %Recovery	LCSD %Recovery	%Recovery Limits	RPD	RPD Limits
Semivolatile Organics by GC/MS-SIM - Westborough Lab Associated sample(s): 01 Batch: WG363130-2 WG363130-3					
Acenaphthene	69	67	40-140	3	40
2-Chloronaphthalene	69	56	40-140	21	40
Fluoranthene	91	94	40-140	3	40
Anthracene	80	77	40-140	4	40
Pyrene	90	95	40-140	5	40
Pentachlorophenol	45	30	30-130	40	40

Surrogate	LCS %Recovery	Qualifier	LCSD %Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	53		48		21-120
Phenol-d6	36		31		10-120
Nitrobenzene-d5	81		73		23-120
2-Fluorobiphenyl	71		55		15-120
2,4,6-Tribromophenol	96		90		10-120
4-Terphenyl-d14	94		100		33-120

Lab Control Sample Analysis

Batch Quality Control

Project Name: PERFORMANCE CONTRACTING
Project Number: 60590
Lab Number: L0906386
Report Date: 05/26/09

Parameter	LCS %Recovery	LCSD %Recovery	%Recovery Limits	RPD	RPD Limits
Semivolatile Organics by GC/MS - Westborough Lab Associated sample(s): 01 Batch: WG363533-2 WG363533-3					
Acenaphthene	77	75	46-118	3	30
1,2,4-Trichlorobenzene	64	66	39-98	3	30
2-Chloronaphthalene	77	79	40-140	3	30
1,2-Dichlorobenzene	61	69	40-140	12	30
1,4-Dichlorobenzene	59	66	36-97	11	30
2,4-Dinitrotoluene	98	92	24-96	6	30
2,6-Dinitrotoluene	82	80	40-140	2	30
Fluoranthene	106	99	40-140	7	30
4-Chlorophenyl phenyl ether	78	84	40-140	7	30
n-Nitrosodi-n-propylamine	72	77	41-116	7	30
Butyl benzyl phthalate	100	94	40-140	6	30
Anthracene	89	84	40-140	6	30
Pyrene	100	94	26-127	6	30
P-Chloro-M-Cresol	74	78	23-97	5	30
2-Chlorophenol	63	70	27-123	11	30
2-Nitrophenol	71	76	30-130	7	30
4-Nitrophenol	58	54	10-80	7	30
2,4-Dinitrophenol	59	54	30-130	9	30
Pentachlorophenol	66	58	9-103	13	30
Phenol	39	44	12-110	12	30

Lab Control Sample Analysis

Batch Quality Control

Project Name: PERFORMANCE CONTRACTING
Project Number: 60590
Lab Number: L0906386
Report Date: 05/26/09

Parameter	LCS %Recovery	LCSD %Recovery	%Recovery Limits	RPD	RPD Limits

Semivolatile Organics by GC/MS - Westborough Lab Associated sample(s): 01 Batch: WG363533-2 WG363533-3

Surrogate	LCS %Recovery	Qualifier	LCSD %Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	53		57		21-120
Phenol-d6	39		42		10-120
Nitrobenzene-d5	72		73		23-120
2-Fluorobiphenyl	78		78		15-120
2,4,6-Tribromophenol	107		103		10-120
4-Terphenyl-d14	108		97		33-120

PCBS

Project Name: PERFORMANCE CONTRACTING **Lab Number:** L0906386

Project Number: 60590 **Report Date:** 05/26/09

SAMPLE RESULTS

Lab ID:	L0906386-01	Date Collected:	05/19/09 16:00
Client ID:	GROUNDWATER	Date Received:	05/19/09
Sample Location:	225 MAIN STREET, NORTHBRIDGE	Field Prep:	Not Specified
Matrix:	Water	Extraction Method:	EPA 3510C
Analytical Method:	5,608	Extraction Date:	05/20/09 14:27
Analytical Date:	05/21/09 11:41	Cleanup Method1:	EPA 3665A
Analyst:	JB	Cleanup Date1:	05/21/09

Parameter	Result	Qualifier	Units	RDL	Dilution Factor
Polychlorinated Biphenyls by GC - Westborough Lab					
Aroclor 1016	ND		ug/l	0.263	1
Aroclor 1221	ND		ug/l	0.263	1
Aroclor 1232	ND		ug/l	0.263	1
Aroclor 1242	ND		ug/l	0.263	1
Aroclor 1248	ND		ug/l	0.263	1
Aroclor 1254	ND		ug/l	0.263	1
Aroclor 1260	ND		ug/l	0.263	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	64		30-150	A
Decachlorobiphenyl	40		30-150	A

Project Name: PERFORMANCE CONTRACTING **Lab Number:** L0906386

Project Number: 60590 **Report Date:** 05/26/09

Method Blank Analysis
Batch Quality Control

Analytical Method: 5,608
Analytical Date: 05/21/09 10:49
Analyst: JB

Extraction Method: EPA 3510C
Extraction Date: 05/20/09 14:27
Cleanup Method1: EPA 3665A
Cleanup Date1: 05/21/09

Parameter	Result	Qualifier	Units	RDL
Polychlorinated Biphenyls by GC - Westborough Lab for sample(s): 01 Batch: WG363203-1				
Aroclor 1016	ND		ug/l	0.250
Aroclor 1221	ND		ug/l	0.250
Aroclor 1232	ND		ug/l	0.250
Aroclor 1242	ND		ug/l	0.250
Aroclor 1248	ND		ug/l	0.250
Aroclor 1254	ND		ug/l	0.250
Aroclor 1260	ND		ug/l	0.250

Surrogate	%Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	66		30-150	A
Decachlorobiphenyl	79		30-150	A

Matrix Spike Analysis
Batch Quality Control

Project Name: PERFORMANCE CONTRACTING
Project Number: 60590

Lab Number: L0906386
Report Date: 05/26/09

Parameter	Native Sample	MS Added	MS Found	MS %Recovery	MSD Found	MSD %Recovery	Recovery Limits	RPD	RPD Limits
Polychlorinated Biphenyls by GC - Westborough Lab Associated sample(s): 01 QC Batch ID: WG363203-3 QC Sample: L0906386-01 Client ID: GROUNDWATER									
Aroclor 1016	ND	2.1	1.21	58	-	-	40-126	-	30
Aroclor 1260	ND	2.1	1.15	55	-	-	40-127	-	30

Surrogate	MS % Recovery	MS Qualifier	MSD % Recovery	MSD Qualifier	Acceptance Criteria	*Column*
2,4,5,6-Tetrachloro-m-xylene	66				30-150	A
Decachlorobiphenyl	55				30-150	A

Lab Control Sample Analysis

Batch Quality Control

Project Name: PERFORMANCE CONTRACTING
Project Number: 60590
Lab Number: L0906386
Report Date: 05/26/09

Parameter	LCS %Recovery	LCSD %Recovery	%Recovery Limits	RPD	RPD Limits
Polychlorinated Biphenyls by GC - Westborough Lab Associated sample(s): 01 Batch: WG363203-2					
Aroclor 1016	66	-	40-126	-	
Aroclor 1260	65	-	40-127	-	

Surrogate	LCS %Recovery	Qualifier	LCSD %Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	78				30-150	A
Decachlorobiphenyl	44				30-150	A

Lab Duplicate Analysis
Batch Quality Control

Project Name: PERFORMANCE CONTRACTING
Project Number: 60590

Lab Number: L0906386
Report Date: 05/26/09

Parameter	Native Sample	Duplicate Sample	Units	RPD	RPD Limits
Polychlorinated Biphenyls by GC - Westborough Lab Associated sample(s): 01 QC Batch ID: WG363203-4 QC Sample: L0906386-01 Client ID: GROUNDWATER					
Aroclor 1016	ND	ND	ug/l	NC	30
Aroclor 1221	ND	ND	ug/l	NC	30
Aroclor 1232	ND	ND	ug/l	NC	30
Aroclor 1242	ND	ND	ug/l	NC	30
Aroclor 1248	ND	ND	ug/l	NC	30
Aroclor 1254	ND	ND	ug/l	NC	30
Aroclor 1260	ND	ND	ug/l	NC	30

Surrogate	%Recovery	Qualifier	%Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	64		73		30-150	A
Decachlorobiphenyl	40		55		30-150	A

METALS

Project Name:	PERFORMANCE CONTRACTING	**Lab Number:**	L0906386
Project Number:	60590	**Report Date:**	05/26/09

SAMPLE RESULTS

Lab ID:	L0906386-01	Date Collected:	05/19/09 16:00
Client ID:	GROUNDWATER	Date Received:	05/19/09
Sample Location:	225 MAIN STREET, NORTHBRIDGE	Field Prep:	Not Specified
Matrix:	Water		

Parameter	Result	Qualifier	Units	RDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
Total Metals - Westborough Lab										
Chromium, Total	0.0039		mg/l	0.0005	1	05/22/09 08:45	05/22/09 15:42	EPA 3005A	1,6020	BM
Dissolved Metals - Westborough Lab										
Antimony, Dissolved	ND		mg/l	0.0005	1	05/20/09 11:30	05/21/09 14:58	EPA 3005A	1,6020	BM
Arsenic, Dissolved	0.0019		mg/l	0.0005	1	05/20/09 11:30	05/21/09 14:58	EPA 3005A	1,6020	BM
Cadmium, Dissolved	ND		mg/l	0.0002	1	05/20/09 11:30	05/21/09 14:58	EPA 3005A	1,6020	BM
Chromium, Dissolved	ND		mg/l	0.0005	1	05/20/09 11:30	05/21/09 14:58	EPA 3005A	1,6020	BM
Copper, Dissolved	ND		mg/l	0.0020	1	05/20/09 11:30	05/21/09 14:58	EPA 3005A	1,6020	BM
Iron, Dissolved	4.0		mg/l	0.05	1	05/21/09 12:00	05/21/09 20:05	EPA 3005A	19,200.7	AI
Lead, Dissolved	0.0006		mg/l	0.0005	1	05/20/09 11:30	05/21/09 14:58	EPA 3005A	1,6020	BM
Mercury, Dissolved	ND		mg/l	0.0002	1	05/21/09 12:05	05/21/09 15:21	EPA 245.2	3,245.1	EZ
Nickel, Dissolved	0.003		mg/l	0.0005	1	05/20/09 11:30	05/21/09 14:58	EPA 3005A	1,6020	BM
Selenium, Dissolved	ND		mg/l	0.001	1	05/20/09 11:30	05/21/09 14:58	EPA 3005A	1,6020	BM
Silver, Dissolved	ND		mg/l	0.0004	1	05/20/09 11:30	05/21/09 14:58	EPA 3005A	1,6020	BM
Zinc, Dissolved	0.0121		mg/l	0.0100	1	05/20/09 11:30	05/21/09 14:58	EPA 3005A	1,6020	BM

Project Name: PERFORMANCE CONTRACTING **Lab Number:** L0906386

Project Number: 60590 **Report Date:** 05/26/09

Method Blank Analysis
Batch Quality Control

Parameter	Result	Qualifier	Units	RDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
Dissolved Metals - Westborough Lab for sample(s): 01 Batch: WG363221-1									
Antimony, Dissolved	ND		mg/l	0.0005	1	05/20/09 11:30	05/21/09 15:18	1,6020	BM
Arsenic, Dissolved	ND		mg/l	0.0005	1	05/20/09 11:30	05/21/09 15:18	1,6020	BM
Cadmium, Dissolved	ND		mg/l	0.0002	1	05/20/09 11:30	05/21/09 15:18	1,6020	BM
Chromium, Dissolved	ND		mg/l	0.0005	1	05/20/09 11:30	05/21/09 15:18	1,6020	BM
Copper, Dissolved	ND		mg/l	0.0020	1	05/20/09 11:30	05/21/09 15:18	1,6020	BM
Lead, Dissolved	ND		mg/l	0.0005	1	05/20/09 11:30	05/21/09 15:18	1,6020	BM
Nickel, Dissolved	ND		mg/l	0.0005	1	05/20/09 11:30	05/21/09 15:18	1,6020	BM
Selenium, Dissolved	ND		mg/l	0.001	1	05/20/09 11:30	05/21/09 15:18	1,6020	BM
Silver, Dissolved	ND		mg/l	0.0004	1	05/20/09 11:30	05/21/09 15:18	1,6020	BM
Zinc, Dissolved	ND		mg/l	0.0100	1	05/20/09 11:30	05/21/09 15:18	1,6020	BM

Prep Information

Digestion Method: EPA 3005A

Parameter	Result	Qualifier	Units	RDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
Dissolved Metals - Westborough Lab for sample(s): 01 Batch: WG363398-1									
Mercury, Dissolved	ND		mg/l	0.0002	1	05/21/09 12:05	05/21/09 15:16	3,245.1	EZ

Prep Information

Digestion Method: EPA 245.2

Parameter	Result	Qualifier	Units	RDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
Dissolved Metals - Westborough Lab for sample(s): 01 Batch: WG363433-1									
Iron, Dissolved	ND		mg/l	0.05	1	05/21/09 12:00	05/21/09 19:56	19,200.7	AI

Prep Information

Digestion Method: EPA 3005A

Project Name: PERFORMANCE CONTRACTING **Lab Number:** L0906386

Project Number: 60590 **Report Date:** 05/26/09

Method Blank Analysis
Batch Quality Control

Parameter	Result	Qualifier	Units	RDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
Total Metals - Westborough Lab for sample(s): 01 Batch: WG363594-5									
Chromium, Total	ND		mg/l	0.0005	1	05/22/09 08:45	05/22/09 15:07	1,6020	BM

Prep Information

Digestion Method: EPA 3005A

Lab Control Sample Analysis

Batch Quality Control

Project Name: PERFORMANCE CONTRACTING
Project Number: 60590
Lab Number: L0906386
Report Date: 05/26/09

Parameter	LCS %Recovery	LCSD %Recovery	%Recovery Limits	RPD	RPD Limits
Dissolved Metals - Westborough Lab Associated sample(s): 01 Batch: WG363221-2					
Antimony, Dissolved	99	-	80-120	-	
Arsenic, Dissolved	97	-	80-120	-	
Cadmium, Dissolved	109	-	80-120	-	
Chromium, Dissolved	105	-	80-120	-	
Copper, Dissolved	108	-	80-120	-	
Lead, Dissolved	103	-	80-120	-	
Nickel, Dissolved	105	-	80-120	-	
Selenium, Dissolved	99	-	80-120	-	
Silver, Dissolved	100	-	80-120	-	
Zinc, Dissolved	111	-	80-120	-	
Dissolved Metals - Westborough Lab Associated sample(s): 01 Batch: WG363398-2					
Mercury, Dissolved	104	-		-	
Dissolved Metals - Westborough Lab Associated sample(s): 01 Batch: WG363433-2					
Iron, Dissolved	110	-		-	
Total Metals - Westborough Lab Associated sample(s): 01 Batch: WG363594-6					
Chromium, Total	94	-	80-120	-	

Matrix Spike Analysis
Batch Quality Control

Project Name: PERFORMANCE CONTRACTING
Project Number: 60590
Lab Number: L0906386
Report Date: 05/26/09

Parameter	Native Sample	MS Added	MS Found	MS %Recovery	MSD Found	MSD %Recovery	Recovery Limits	RPD	RPD Limits
Dissolved Metals - Westborough Lab Associated sample(s): 01 QC Batch ID: WG363221-4 QC Sample: L0906386-01 Client ID: GROUNDWATER									
Antimony, Dissolved	ND	0.5	0.4951	99	-	-	80-120	-	20
Arsenic, Dissolved	0.0019	0.12	0.1285	105	-	-	80-120	-	20
Cadmium, Dissolved	ND	0.051	0.0546	107	-	-	80-120	-	20
Chromium, Dissolved	ND	0.2	0.2127	106	-	-	80-120	-	20
Copper, Dissolved	ND	0.25	0.2691	108	-	-	80-120	-	20
Lead, Dissolved	0.0006	0.51	0.5400	106	-	-	80-120	-	20
Nickel, Dissolved	0.003	0.5	0.5301	105	-	-	80-120	-	20
Selenium, Dissolved	ND	0.12	0.124	103	-	-	80-120	-	20
Silver, Dissolved	ND	0.05	0.0496	99	-	-	80-120	-	20
Zinc, Dissolved	0.0121	0.5	0.5571	109	-	-	80-120	-	20
Dissolved Metals - Westborough Lab Associated sample(s): 01 QC Batch ID: WG363398-4 QC Sample: L0906386-01 Client ID: GROUNDWATER									
Mercury, Dissolved	ND	0.001	0.0010	99	-	-		-	
Dissolved Metals - Westborough Lab Associated sample(s): 01 QC Batch ID: WG363433-4 QC Sample: L0906386-01 Client ID: GROUNDWATER									
Iron, Dissolved	4.0	1	5.4	140	-	-		-	
Total Metals - Westborough Lab Associated sample(s): 01 QC Batch ID: WG363594-8 QC Sample: L0906386-01 Client ID: GROUNDWATER									
Chromium, Total	0.0039	0.2	0.2103	103	-	-	80-120	-	20

Lab Duplicate Analysis
Batch Quality Control

Project Name: PERFORMANCE CONTRACTING
Project Number: 60590

Lab Number: L0906386
Report Date: 05/26/09

Parameter	Native Sample	Duplicate Sample	Units	RPD	RPD Limits
Dissolved Metals - Westborough Lab Associated sample(s): 01 QC Batch ID: WG363221-3 QC Sample: L0906386-01 Client ID: GROUNDWATER					
Antimony, Dissolved	ND	ND	mg/l	NC	20
Arsenic, Dissolved	0.0019	0.0020	mg/l	1	20
Cadmium, Dissolved	ND	ND	mg/l	NC	20
Chromium, Dissolved	ND	ND	mg/l	NC	20
Copper, Dissolved	ND	ND	mg/l	NC	20
Lead, Dissolved	0.0006	0.0006	mg/l	3	20
Nickel, Dissolved	0.003	0.0032	mg/l	6	20
Selenium, Dissolved	ND	ND	mg/l	NC	20
Silver, Dissolved	ND	ND	mg/l	NC	20
Zinc, Dissolved	0.0121	0.0125	mg/l	3	20
Dissolved Metals - Westborough Lab Associated sample(s): 01 QC Batch ID: WG363398-3 QC Sample: L0906386-01 Client ID: GROUNDWATER					
Mercury, Dissolved	ND	ND	mg/l	NC	
Dissolved Metals - Westborough Lab Associated sample(s): 01 QC Batch ID: WG363433-3 QC Sample: L0906386-01 Client ID: GROUNDWATER					
Iron, Dissolved	4.0	4.0	mg/l	0	
Total Metals - Westborough Lab Associated sample(s): 01 QC Batch ID: WG363594-7 QC Sample: L0906386-01 Client ID: GROUNDWATER					
Chromium, Total	0.0039	0.0039	mg/l	0	20

INORGANICS
&
MISCELLANEOUS

Project Name: PERFORMANCE CONTRACTING
Project Number: 60590
Lab Number: L0906386
Report Date: 05/26/09

SAMPLE RESULTS

Lab ID: L0906386-01
Client ID: GROUNDWATER
Sample Location: 225 MAIN STREET, NORTHBRIDGE
Matrix: Water

Date Collected: 05/19/09 16:00
Date Received: 05/19/09
Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab									
Solids, Total Suspended	62		mg/l	5.0	1	-	05/20/09 14:35	30,2540D	DW
Cyanide, Total	ND		mg/l	0.005	1	05/20/09 14:35	05/20/09 18:48	30,4500CN-CE	DD
Chlorine, Total Residual	ND		mg/l	0.02	1	-	05/20/09 00:01	30,4500CL-D	JO
TPH	ND		mg/l	4.40	1.1	05/19/09 20:00	05/20/09 21:45	74,1664A	JO
Phenolics, Total	ND		mg/l	0.03	1	-	05/20/09 17:31	4,420.1	TH
Chromium, Hexavalent	ND		mg/l	0.010	1	05/20/09 01:00	05/20/09 01:00	30,3500CR-D	JT
General Chemistry									
Trivalent Chromium	ND		mg/l	0.01	1	-	05/22/09 15:00	30,3500-Cr	ED

Project Name: PERFORMANCE CONTRACTING **Lab Number:** L0906386

Project Number: 60590 **Report Date:** 05/26/09

Method Blank Analysis
Batch Quality Control

Parameter	Result	Qualifier	Units	RDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab for sample(s): 01 Batch: WG363088-2									
TPH	ND		mg/l	4.00	1	05/19/09 20:00	05/20/09 21:45	74,1664A	JO
General Chemistry - Westborough Lab for sample(s): 01 Batch: WG363115-2									
Chlorine, Total Residual	ND		mg/l	0.02	1	-	05/20/09 00:01	30,4500CL-D	JO
General Chemistry - Westborough Lab for sample(s): 01 Batch: WG363119-1									
Chromium, Hexavalent	ND		mg/l	0.010	1	05/20/09 01:00	05/20/09 01:00	30,3500CR-D	JT
General Chemistry - Westborough Lab for sample(s): 01 Batch: WG363165-1									
Solids, Total Suspended	ND		mg/l	5.0	1	-	05/20/09 14:35	30,2540D	DW
General Chemistry - Westborough Lab for sample(s): 01 Batch: WG363207-1									
Cyanide, Total	ND		mg/l	0.005	1	05/20/09 14:35	05/20/09 18:37	30,4500CN-CE	DD
General Chemistry - Westborough Lab for sample(s): 01 Batch: WG363258-1									
Phenolics, Total	ND		mg/l	0.03	1	-	05/20/09 17:25	4,420.1	TH

Lab Control Sample Analysis

Batch Quality Control

Project Name: PERFORMANCE CONTRACTING
Project Number: 60590

Lab Number: L0906386
Report Date: 05/26/09

Parameter	LCS %Recovery	LCSD %Recovery	%Recovery Limits	RPD	RPD Limits
General Chemistry - Westborough Lab Associated sample(s): 01 Batch: WG363088-1					
TPH	85	-	64-132	-	34
General Chemistry - Westborough Lab Associated sample(s): 01 Batch: WG363115-1					
Chlorine, Total Residual	93	-		-	
General Chemistry - Westborough Lab Associated sample(s): 01 Batch: WG363119-2					
Chromium, Hexavalent	102	-	85-115	-	20
General Chemistry - Westborough Lab Associated sample(s): 01 Batch: WG363207-2					
Cyanide, Total	94	-	80-120	-	
General Chemistry - Westborough Lab Associated sample(s): 01 Batch: WG363258-2					
Phenolics, Total	99	-	82-111	-	12

Matrix Spike Analysis
Batch Quality Control

Project Name: PERFORMANCE CONTRACTING
Project Number: 60590

Lab Number: L0906386
Report Date: 05/26/09

Parameter	Native Sample	MS Added	MS Found	MS %Recovery	MSD Found	MSD %Recovery	Recovery Limits	RPD	RPD Limits
General Chemistry - Westborough Lab Associated sample(s): 01 QC Batch ID: WG363088-3 QC Sample: L0906322-01 Client ID: MS Sample									
TPH	ND	22.7	ND	87	-	-	64-132	-	34
General Chemistry - Westborough Lab Associated sample(s): 01 QC Batch ID: WG363119-4 QC Sample: L0906386-01 Client ID: GROUNDWATER									
Chromium, Hexavalent	ND	0.1	0.099	99	-	-	85-115	-	20
General Chemistry - Westborough Lab Associated sample(s): 01 QC Batch ID: WG363207-4 QC Sample: L0906189-02 Client ID: MS Sample									
Cyanide, Total	ND	0.2	0.187	94	-	-	80-120	-	30
General Chemistry - Westborough Lab Associated sample(s): 01 QC Batch ID: WG363258-3 QC Sample: L0906322-01 Client ID: MS Sample									
Phenolics, Total	ND	0.8	0.80	100	-	-	77-124	-	12

Lab Duplicate Analysis
Batch Quality Control

Project Name: PERFORMANCE CONTRACTING
Project Number: 60590

Lab Number: L0906386
Report Date: 05/26/09

Parameter	Native Sample	Duplicate Sample	Units	RPD	RPD Limits
General Chemistry - Westborough Lab Associated sample(s): 01 QC Batch ID: WG363088-4 QC Sample: L0906322-02 Client ID: DUP Sample					
TPH	ND	ND	mg/l	NC	34
General Chemistry - Westborough Lab Associated sample(s): 01 QC Batch ID: WG363115-3 QC Sample: L0906386-01 Client ID: GROUNDWATER					
Chlorine, Total Residual	ND	ND	mg/l	NC	
General Chemistry - Westborough Lab Associated sample(s): 01 QC Batch ID: WG363119-3 QC Sample: L0906386-01 Client ID: GROUNDWATER					
Chromium, Hexavalent	ND	ND	mg/l	NC	20
General Chemistry - Westborough Lab Associated sample(s): 01 QC Batch ID: WG363165-2 QC Sample: L0906390-01 Client ID: DUP Sample					
Solids, Total Suspended	140	150	mg/l	7	32
General Chemistry - Westborough Lab Associated sample(s): 01 QC Batch ID: WG363207-3 QC Sample: L0906189-02 Client ID: DUP Sample					
Cyanide, Total	ND	ND	mg/l	NC	30
General Chemistry - Westborough Lab Associated sample(s): 01 QC Batch ID: WG363258-4 QC Sample: L0906322-02 Client ID: DUP Sample					
Phenolics, Total	0.14	0.15	mg/l	7	12

Project Name: PERFORMANCE CONTRACTING
Project Number: 60590

Lab Number: L0906386
Report Date: 05/26/09

Sample Receipt and Container Information

Were project specific reporting limits specified? YES

Cooler Information

Cooler	Custody Seal
A	Absent

Container Information

Container ID	Container Type	Cooler	pH	Temp	Pres	Seal	Analysis
L0906386-01A	Vial Na2S2O3 preserved	A	N/A	10.4	Y	Absent	504(14)
L0906386-01B	Vial Na2S2O3 preserved	A	N/A	10.4	Y	Absent	504(14)
L0906386-01C	Vial HCl preserved	A	N/A	10.4	Y	Absent	8260(14)
L0906386-01D	Vial HCl preserved	A	N/A	10.4	Y	Absent	8260(14)
L0906386-01E	Amber 1000ml unpreserved	A	7	10.4	Y	Absent	8270TCL(7),8270TCL-SIM(7)
L0906386-01F	Amber 1000ml unpreserved	A	7	10.4	Y	Absent	8270TCL(7),8270TCL-SIM(7)
L0906386-01G	Plastic 1000ml unpreserved	A	7	10.4	Y	Absent	TSS-2540(7)
L0906386-01H	Plastic 1000ml unpreserved	A	7	10.4	Y	Absent	SPECWC(),CR-6020T(180),HEXCR-3500(1),TRC-4500(1)
L0906386-01I	Amber 1000ml H2SO4 preserved	A	<2	10.4	Y	Absent	TPHENOL-420(28)
L0906386-01J	Amber 1000ml H2SO4 preserved	A	<2	10.4	Y	Absent	TPHENOL-420(28)
L0906386-01K	Amber 1000ml HCl preserved	A	<2	10.4	Y	Absent	TPH-1664(28)
L0906386-01L	Amber 1000ml HCl preserved	A	<2	10.4	Y	Absent	TPH-1664(28)
L0906386-01M	Amber 1000ml Na2S2O3	A	7	10.4	Y	Absent	PCB-608(7)
L0906386-01N	Amber 1000ml Na2S2O3	A	7	10.4	Y	Absent	PCB-608(7)
L0906386-01O	Plastic 250ml NaOH preserved	A	>12	10.4	Y	Absent	TCN-4500(14)
L0906386-01P	Plastic 500ml unpreserved	A	7	10.4	Y	Absent	-
L0906386-01X	Plastic 500ml HNO3 preserved spl	A	<2	10.4	Y	Absent	CU-6020S(180),FE-RI(180),SE-6020S(180),ZN-6020S(180),CR-6020S(180),NI-6020S(180),PB-6020S(180),AG-6020S(180),AS-6020S(180),HG-R(28),SB-6020S(180),CD-6020S(180)
L0906386-01Y	Plastic 250ml HNO3 preserved spl	A	<2	10.4	Y	Absent	-
L0906386-01Z	Plastic 250ml HNO3 preserved spl	A	<2	10.4	Y	Absent	CR-6020T(180)
L0906386-02A	Vial Na2S2O3 preserved	A	N/A	10.4	Y	Absent	HOLD(14)
L0906386-02B	Vial HCl preserved	A	N/A	10.4	Y	Absent	HOLD(14)

*Hold days indicated by values in parentheses

Project Name:	PERFORMANCE CONTRACTING	**Lab Number:**	L0906386
Project Number:	60590	**Report Date:**	05/26/09

GLOSSARY

Acronyms

EPA	· Environmental Protection Agency.
LCS	· Laboratory Control Sample: A sample matrix, free from the analytes of interest, spiked with verified known amounts of analytes or a material containing known and verified amounts of analytes.
LCSD	· Laboratory Control Sample Duplicate: Refer to LCS.
MS	· Matrix Spike Sample: A sample prepared by adding a known mass of target analyte to a specified amount of matrix sample for which an independent estimate of target analyte concentration is available.
MSD	· Matrix Spike Sample Duplicate: Refer to MS.
NA	· Not Applicable.
NC	· Not Calculated: Term is utilized when one or more of the results utilized in the calculation are non-detect at the parameter's reporting unit.
ND	· Not detected at the reported detection limit for the sample.
NI	· Not Ignitable.
RDL	· Reported Detection Limit: The value at which an instrument can accurately measure an analyte at a specific concentration. The RDL includes any adjustments from dilutions, concentrations or moisture content, where applicable.
RPD	· Relative Percent Difference: The results from matrix and/or matrix spike duplicates are primarily designed to assess the precision of analytical results in a given matrix and are expressed as relative percent difference (RPD). Values which are less than five times the reporting limit for any individual parameter are evaluated by utilizing the absolute difference between the values; although the RPD value will be provided in the report.

Terms

Analytical Method: Both the document from which the method originates and the analytical reference method. (Example: EPA 8260B is shown as 1,8260B.) The codes for the reference method documents are provided in the References section of the Addendum.

Data Qualifiers

*	· The batch duplicate RPD exceeds the acceptance criteria. This flag is not applicable when the sample concentrations are less than 5x the RDL. (Metals only.)
A	· Spectra identified as "Aldol Condensation Product".
B	· The analyte was detected above the reporting limit in the associated method blank. Flag only applies to associated field samples that have detectable concentrations of the analyte.
D	· Concentration of analyte was quantified from diluted analysis. Flag only applies to field samples that have detectable concentrations of the analyte.
E	· Concentration of analyte exceeds the range of the calibration curve and/or linear range of the instrument.
H	· The analysis of pH was performed beyond the regulatory-required holding time of 15 minutes from the time of sample collection.
N	· The matrix spike recovery exceeds the acceptance criteria. This flag is not applicable when the sample concentration is greater than 4x the spike added. (Metals only.)
P	· The RPD between the results for the two columns exceeds the method-specified criteria.
R	· Analytical results are from sample re-analysis.
RE	· Analytical results are from sample re-extraction.
J	· Estimated value. This represents an estimated concentration for Tentatively Identified Compounds (TICs).

Project Name:	PERFORMANCE CONTRACTING	**Lab Number:**	L0906386
Project Number:	60590	**Report Date:**	05/26/09

REFERENCES

1 Test Methods for Evaluating Solid Waste: Physical/Chemical Methods. EPA SW-846. Third Edition. Updates I - IIIA, 1997.

3 Methods for the Determination of Metals in Environmental Samples, Supplement I. EPA/600/R-94/111. May 1994.

4 Methods for Chemical Analysis of Water and Wastes. EPA 600/4-79-020. Revised March 1983.

5 Methods for the Organic Chemical Analysis of Municipal and Industrial Wastewater. Appendix A, Part 136, 40 CFR (Code of Federal Regulations).

14 Methods for the Determination of Organic Compounds in Finished Drinking Water and Raw Source Water. EPA/600/4-88/039, Revised July 1991.

19 Inductively Coupled Plasma Atomic Emission Spectrometric Method for Trace Element Analysis of Water and Wastes. Appendix C, Part 136, 40 CFR (Code of Federal Regulations). July 1, 1999 edition.

30 Standard Methods for the Examination of Water and Wastewater. APHA-AWWA-WPCF. 18th Edition. 1992.

74 Method 1664,Revision A: N-Hexane Extractable Material (HEM; Oil & Grease) and Silica Gel Treated N-Hexane Extractable Material (SGT-HEM; Non-polar Material) by Extraction and Gravimetry, EPA-821-R-98-002, February 1999.

LIMITATION OF LIABILITIES

Alpha Analytical performs services with reasonable care and diligence normal to the analytical testing laboratory industry. In the event of an error, the sole and exclusive responsibility of Alpha Woods Hole Labs shall be to re-perform the work at it's own expense. In no event shall Alpha Analytical be held liable for any incidental, consequential or special damages, including but not limited to, damages in any way connected with the use of, interpretation of, information or analysis provided by Alpha Woods Hole Labs.

We strongly urge our clients to comply with EPA protocol regarding sample volume, preservation, cooling, containers, sampling procedures, holding time and splitting of samples in the field.

Certificate/Approval Program Summary

Last revised February 18, 2009 - Westboro Facility

The following list includes only those analytes/methods for which certification/approval is currently held.
For a complete listing of analytes for the referenced methods, please contact your Alpha Customer Service Representative.

Connecticut Department of Public Health Certificate/Lab ID: PH-0574.

Drinking Water (Inorganic Parameters: Color, pH, Turbidity, Conductivity, Alkalinity, Chloride, Free Residual Chlorine, Fluoride, Calcium Hardness, Sulfate, Nitrate, Nitrite, Aluminum, Antimony, Arsenic, Barium, Beryllium, Cadmium, Calcium, Chromium, Copper, Iron, Lead, Magnesium, Manganese, Mercury, Molybdenum, Nickel, Potassium, Selenium, Silver, Sodium, Thallium, Vanadium, Zinc, Total Dissolved Solids, Total Organic Carbon, Total Cyanide, Perchlorate. Organic Parameters: Haloacetic Acids, Volatile Organics 524.2, Total Trihalomethanes 524.2, 1,2-Dibromo-3-chloropropane (DBCP), Ethylene Dibromide (EDB).)
Wastewater/Non-Potable Water (Inorganic Parameters: Color, pH, Conductivity, Acidity, Alkalinity, Chloride, Total Residual Chlorine, Fluoride, Total Hardness, Calcium Hardness, Silica, Sulfate, Sulfide, Ammonia, Kjeldahl Nitrogen, Nitrate, Nitrite, O-Phosphate, Total Phosphorus, Aluminum, Antimony, Arsenic, Barium, Beryllium, Boron, Cadmium, Calcium, Chromium, Hexavalent Chromium, Cobalt, Copper, Iron, Lead, Magnesium, Manganese, Mercury, Molybdenum, Nickel, Potassium, Selenium, Silver, Sodium, Strontium, Thallium, Tin, Titanium, Vanadium, Zinc, Total Residue (Solids), Total Dissolved Solids, Total Suspended Solids (non-filterable), BOD, CBOD, COD, TOC, Total Cyanide, Phenolics, Foaming Agents (MBAS), Bromide, Oil and Grease. Organic Parameters: PCBs, Organochlorine Pesticides, Technical Chlordane, Toxaphene, 2,4-D, 2,4,5-T, 2,4,5-TP(Silvex), Acid Extractables (Phenols), Benzidines, Phthalate Esters, Nitrosamines, Nitroaromatics & Isophorone, Polynuclear Aromatic Hydrocarbons, Haloethers, Chlorinated Hydrocarbons, Volatile Organics.)
Solid Waste/Soil (Inorganic Parameters: Lead in Paint, pH, Aluminum, Antimony, Arsenic, Barium, Beryllium, Boron, Cadmium, Calcium, Chromium, Hexavalent Chromium, Cobalt, Copper, Iron, Lead, Magnesium, Manganese, Mercury, Molybdenum, Nickel, Potassium, Selenium, Silver, Sodium, Thallium, Tin, Vanadium, Zinc, Total Cyanide, Ignitability, Phenolics, Corrosivity, TCLP Leach (1311), Reactivity. Organic Parameters: PCBs, Organochlorine Pesticides, Technical Chlordane, Toxaphene, Extractable Petroleum Hydrocarbons (ETPH), Dicamba, 2,4-D, 2,4,5-T, 2,4,5-TP(Silvex), Volatile Organics, Acid Extractables (Phenols), 3.3'-Dichlorobenzidine, Phthalates, Nitrosamines, Nitroaromatics & Cyclic Ketones, PAHs, Haloethers, Chlorinated Hydrocarbons.)

Maine Department of Human Services Certificate/Lab ID: MA0086.
Drinking Water (Inorganic Parameters: SM9215B, 9221E, 9222B, 9222D, 9223B, EPA 150.1, 180.1, 300.0, 353.2, SM2130B, 2320B, 4500Cl-D, 4500CN-C, 4500CN-E, 4500F-C, 4500H+B,4500NO3-F, EPA 200.7, EPA 200.8, 245.1. Organic Parameters: 504.1, 524.2, SM 6251B.)
Wastewater/Non-Potable Water (Inorganic Parameters: EPA 120.1, 1664A, 350.1, 351.1, 353.2, 410.4, 420.1, Lachat 10-107-06-1-B, SM2320B, 2340B, 2510B, 2540C, 2540D, 426C, 4500Cl-D, 4500Cl-E, 4500CN-C, 4500CN-E, 4500F-B, 4500F-C, 4500H+B, 4500Norg-B, 4500Norg-C, 4500NH3-B, 4500NH3-G, 4500NH3-H, 4500NO3-F, 4500P-B.5, 4500P-E, 5210B, 5220D, 5310C, EPA 200.7, 200.8, 245.1. Organic Parameters: 608, 624.)

Massachusetts Department of Environmental Protection Certificate/Lab ID: M-MA086.
Drinking Water
Inorganic Parameters: (EPA 200.8 for: Sb,As,Ba,Be,Cd,Cr,Cu,Pb,Ni,Se,Tl)
(EPA 200.7 for: Ba,Be,Ca,Cd,Cr,Cu,Na,Ni) 245.1, (300.0 for: Nitrate-N, Nitrite-N, Fluoride, Sulfate)
353.2 for: Nitrate-N, Nitrite-N; SM4500NO3-F, 4500F-C, 4500CN-CE, EPA 180.1, SM2130B, SM4500Cl-D, 2320B, SM2540C, EPA 150.1, SM4500H-B.
Organic Parameters: (EPA 524.2 for: Trihalomethanes, Volatile Organics)
(504.1 for: 1,2-Dibromoethane, 1,2-Dibromo-3-Chloropropane), SM6251B, 314.0.

Non-Potable Water
Inorganic Parameters:, (EPA 200.8 for: Al,Sb,As,Be,Cd,Cr,Cu,Pb,Mn,Ni,Se,Ag,Tl,Zn)
(EPA 200.7 for: Al,Sb,As,Be,Cd,Cr,Co,Cu,Fe,Pb,Mn,Mo,Ni,Se,Ag,Sr,Tl,Ti,V,Zn,Ca,Mg,Na,K)
245.1, SM4500H,B, EPA 120.1, SM2510B, 2540C, 2540B, 2320B, 4500CL-E, 4500F-BC, 426C, SM4500NH3-BH, (EPA 350.1 for: Ammonia-N), LACHAT 10-107-06-1-B for Nitrate-N, SM4500NO3-F, 353.2 for Nitrate-N, SM4500NH3-B,C-Titr, SM4500NH3-BC-NES, EPA 351.1, SM4500P-E, 4500P-B,E, 5220D, EPA 410.4, SM 5210B, 5310C, 4500CN-CE, 2540D, 4500CL-D, EPA 1664, SM14 510AC, EPA 420.1
Organic Parameters: (EPA 624 for Volatile Halocarbons, Volatile Aromatics)
(608 for: Chlordane, Aldrin, Dieldrin, DDD, DDE, DDT, Heptachlor, Heptachlor Epoxide, PCB-Water)
600/4-81-045-PCB-Oil

Massachusetts Department of Environmental Protection Certificate/Lab ID: M-MA086.
Drinking Water
Microbiology Parameters: SM9215B; MF-SM9222B; ENZ. SUB. SM9223; EC-SM9221E; MF-SM9222D; ENZ. SUB. SM9223;

New Hampshire Department of Environmental Services Certificate/Lab ID: 200307.
Drinking Water (Inorganic Parameters: SM6215B, 9222B, 9223B Colilert, EPA 200.7, 200.8, 245.2, 110.2, 120.1, 150.1, 300.0, 325.2, 314.0, SM4500CN-E, 4500H+B, 4500NO3-F, 2320B, 2510B, 2540C, 4500F-C, 5310C, 2120B, EPA 331.0. Organic Parameters: 504.1, 524.2, SM6251B.)
Non-Potable Water (Inorganic Parameters: SM9222D, 9221B, 9222B, 9221E-EC, EPA 200.7, 200.8, 245.1, 245.2, SW-846 6010B, 6020, 7196A, 7470A, SM3500-CR-D, EPA 120.1, 150.1, 300.0, 305.1, 310.1, 325.2, 340.2, 350.1, 350.2, 351.1, 353.2, 354.1, 365.2, 375.4, 376.2, 405.1, 415.1, 420.1, 425.1, 1664A, SW-846 9010, 9030, 9040B, EPA 160.1, 160.2, 160.3, SM426C, SM2310B, 2540B, 2540D, 4500H+B, 4500NH3-H, 4500NH3-E, 4500NO2-B, 4500P-E, 4500-S2-D, 5210B, 2320B, 2540C, 4500F-C, 5310C, 5540C, LACHAT 10-117-07-1-B, LACHAT 10-107-06-1-B, LACHAT 10-107-04-1-C, LACHAT 10-107-04-1-J, LACHAT 10-117-07-1-A, SM4500CL-E, LACHAT 10-204-00-1-A, LACHAT 10-107-06-2-D. Organic Parameters: SW-846 3005A, 3015A, 3510C, 5030B, 8021B, 8260B, 8270C, 8330, EPA 624, 625, 608, SW-846 8082, 8081A.)
Solid & Chemical Materials (Inorganic Parameters: SW-846 6010B, 7196A, 7471A, 7.3.3.2, 7.3.4.2, 1010, 1030, 9010, 9012A, 9014, 9030B, 9040, 9045C, 9050C, 1311, 3005A, 3050B, 3051A. Organic Parameters: SW-846 3540C, 3545, 3580A, 5030B, 5035, 8021B, 8260B, 8270C, 8330, 8151A, 8082, 8081A.)

New Jersey Department of Environmental Protection Certificate/Lab ID: MA935.
Drinking Water (Inorganic Parameters: SM9222B, 9221E, 9223B, 9215B, 4500NO3-F, 4500F-C, EPA 300.0, 200.7, 2540C, 2320B, 314.0, 331.0, 110.2, SM2120B, 2510B, 5310C, EPA 150.1, SM4500H-B, EPA 200.8, 245.2. Organic Parameters: 504.1, SM6251B, 524.2.)
Non-Potable Water (Inorganic Parameters: SM5210B, EPA 410.1, SM5220D, 4500Cl-D, EPA 300.0, SM2120B, SM4500F-BC, EPA 200.7, 351.1, LACHAT 10-107-06-2-D, EPA 353.2, SM4500NO3-F, 4500NO2-B, EPA 1664A, SM5310B, C or D, 4500-PE, EPA 420.1, SM4500P-B5+E, 2540B, 2540C, 2540D, EPA 120.1, SM2510B, SM15 426C, SM9221CE, 9222D, 9221B, 9222B, 9215B, 2310B, 2320B, 4500NH3-H, EPA 350.2/.1, SM5210B, SW-846 3015, 6020, 7470A, 5540C, 4500H-B, EPA 200.8, SM3500Cr-D, EPA 245.1, 245.2, SW-846 9040B, 3005A, EPA 6010B, 7196A, SW-846 9010B, 9030B. Organic Parameters: SW-846 8260B, 8270C, 3510C, EPA 608, 624, 625, SW-846 5030B, 8021B, 8081A, 8082, 8151A, 8330.)
Solid & Chemical Materials (Inorganic Parameters: SW-846 9040B, 3005A, 6010B, 7196A, 5030B, 9010B, 9030B, 1030, 1311, 3050B, 3051, 7471A, 9014, 9012A, 9045C, 9050A, 9065. Organic Parameters: SW-846 8021B, 8081A, 8082, 8151A, 8330, 8260B, 8270C, 1311, 3540C, 3545, 3550B, 3580A, 5035L, 5035H.)

New York Department of Health Certificate/Lab ID: 11148.
Drinking Water (Inorganic Parameters: SM9223B, 9222B, 8215B, EPA 200.8, 200.7, 245.2, SM5310C, EPA 314.0, 331.0, SM2320B, EPA 300.0, 325.2, 110.2, SM2120B, 4500CN-E, 4500F-C, EPA 150.1, SM4500H-B, 4500NO3-F, 2540C, EPA 120.1, SM 2510B. Organic Parameters: EPA 524.2, 504.1, SM6251B.)
Non-Potable Water (Inorganic Parameters: SM9221E, 9222D, 9221B, 9222B, 9215B, EPA 405.1, SM5210B, EPA 410.4, SM5220D, EPA 305.1, SM2310B-4a, EPA 310.1, SM2320B, EPA 200.7, 300.0, 325.2, LACHAT 10-117-07-1A or B, SM4500Cl-E, EPA 340.2, SM4500F-C, EPA 375.4, SM15 426C, EPA 350.1, 350.2, LACHAT 10-107-06-1-B, SM4500NH3-H, EPA 351.1, LACHAT 10-107-06-2, EPA 353.2, LACHAT 10-107-041-C, SM4500-NO30F, EPA 354.1, SM4500-NO2-B, EPA 365.2, SM4500P-E, EPA 160.3, SM2540B, EPA 160.1, SM2540C, EPA 160.2, SM2540D, EPA 200.8, EPA 6010B, 6020, EPA 7196A, S\M3500Cr-D, EPA 245.1, 245.2, 7470A, 110.2, SM2120B, 335.2, LACHAT 10-204-00-1-A, EPA 150.1, 9040B, SM4500-HB, EPA 1664A, EPA 415.1, SM5310C, EPA 420.1, SM14 510C, EPA 120.1, SM2510B, EPA 376.2, SM4500S-D, EPA 425.1, SM5540C, EPA 3005A, 3015. Organic Parameters: EPA 624, 8260B, 8270C, 625, 608, 8081A, 8151A, 8330, 8082, 8021B, EPA 3510C, 5030B, 9010B, 9030B.)
Solid & Hazardous Waste (Inorganic Parameters: EPA 9040B, 9045C, 1010, 1030, SW-846 Ch 7 Sec 7.3, EPA 6010B, 7196A, 7471A, 9012A, 9014, 9040B, 9045C, 9065, 9050, EPA 1311, 3005A, 3050B, 3051, 9010B, 9030B. Organic Parameters: EPA 8260B, 8270C, 8081A, 8151A, 8330, 8082, 8021B, 3540C, 3545, 3580, 5030B, 5035.)
Analytical Services Protocol: CLP Volatile Organics, CLP Inorganics, CLP PCB/Pesticides.

Rhode Island Department of Health Certificate/Lab ID: LAO00065.
Refer to MA-DEP Certificate for Potable and Non-Potable Water.
Refer to NY-DOH Certificate for Potable and Non-Potable Water.

Pennsylvania Department of Environmental Protection Certificate/Lab ID: 68-03671. Registered Laboratory.

CHAIN OF CUSTODY

PAGE 1 OF 1

ALPHA TECHNICAL

WESTBORO, MA TEL: 508-898-9220 FAX: 508-898-9193

MANSFIELD, MA TEL: 508-822-9300 FAX: 508-822-3288

Date Rec'd in Lab: 5/19/09

ALPHA Job #: L0906386

Client Information

Client: Triumvirate Environmental

Address: 61 Inverbelt Rd, Somerville, MA

Phone: 800-966-5282

Fax:

Email: mbricher@Triumvirate.com

☐ These samples have been previously analyzed by Alpha

Project Information

Project Name: Performance Contracting

Project Location: 335 Main street, Northbridge

Project #: 60590

Project Manager: M. Bricher

ALPHA Quote #:

Turn-Around Time

☐ Standard ☒ RUSH (only confirmed if pre-approved!)

Date Due: 5/20 Time: 5:00pm

Report Information - Data Deliverables

☐ FAX ☒ EMAIL

☒ ADEx ☐ Add'l Deliverables

Billing Information

☐ Same as Client info PO #:

Regulatory Requirements/Report Limits

State /Fed Program	Criteria
MA	

MA MCP PRESUMPTIVE CERTAINTY --- CT REASONABLE CONFIDENCE PROTO-

☐ Yes ☐ No Are MCP Analytical Methods Required?

☐ Yes ☐ No Are CT RCP (Reasonable Confidence Protocols) Required?

Other Project Specific Requirements/Comments/Detection Limits:

must meet all effluent detection limits

call 774-313-9048 (Jeremy) with questions

ANALYSIS: NPDES RGP Sect Appendix 3

SAMPLE HANDLING

Filtration ☒ (metals)

☐ Done

☐ Not needed

☒ Lab to do

Preservation

☐ Lab to do

(Please specify below)

ALPHA Lab ID (Lab Use Only)	Sample ID	Collection Date	Collection Time	Sample Matrix	Sampler's Initials	Sample Specific Comments	TOTAL # BOTTLES
06386.1	Groundwater	5/19/09	4:00	GW	JFB	X	18

RECEIVED MAY 29 2009 MADEP-CERO

PLEASE ANSWER QUESTIONS ABOVE!

IS YOUR PROJECT MA MCP or CT RCP?

Container Type

Preservative

Relinquished By:	Date/Time	Received By:	Date/Time
	5/19/09 7:45		5/19/09 17:05

Please print clearly, legibly and completely. Samples can not be logged in and turnaround time clock will not start until any ambiguities are resolved. All samples submitted are subject to Alpha's Terms and Conditions. See reverse side.

FORM NO: 01-01 (rev. 14-OCT-07)

05260911:40